

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT				
<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> McKinnon 4-15-3-3WH				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> WILDCAT				
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>				
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY						<b>7. OPERATOR PHONE</b> 435 646-4825				
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052						<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> Patented			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b> Charles R. McKinnon and Loraine McKinnon, Trustees						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b> HC64 Box 380				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b> 435-646-3240 ,						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>		<b>RANGE</b>	<b>MERIDIAN</b>	
LOCATION AT SURFACE		530 FNL 882 FWL		NWNW	15	3.0 S		3.0 W	U	
Top of Uppermost Producing Zone		660 FNL 660 FWL		NWNW	15	3.0 S		3.0 W	U	
At Total Depth		660 FSL 660 FWL		SWSW	15	3.0 S		3.0 W	U	
<b>21. COUNTY</b> DUCESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 530			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 40				
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 0			<b>26. PROPOSED DEPTH</b> MD: 13398 TVD: 8851				
<b>27. ELEVATION - GROUND LEVEL</b> 5339			<b>28. BOND NUMBER</b> B001834			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478				
<b>Hole, Casing, and Cement Information</b>										
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Length</b>	<b>Weight</b>	<b>Grade &amp; Thread</b>	<b>Max Mud Wt.</b>	<b>Cement</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>
Cond	17.5	14	0 - 60	37.0	H-40 ST&C	0.0	Class G	35	1.17	15.8
Surf	12.25	9.625	0 - 2500	36.0	J-55 LT&C	8.3	Type III	216	3.33	11.0
							Type III	95	1.9	13.0
I1	8.75	7	0 - 9404	26.0	P-110 Other	11.5	35/65 Poz	273	2.59	11.5
							50/50 Poz	300	1.62	13.0
Prod	6.125	4.5	8478 - 13398	13.5	P-110 Other	11.5	No Used	0	0.0	0.0
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Don Hamilton				<b>TITLE</b> Permitting Agent				<b>PHONE</b> 435 719-2018		
<b>SIGNATURE</b>				<b>DATE</b> 11/13/2012				<b>EMAIL</b> starpoint@etv.net		
<b>API NUMBER ASSIGNED</b> 43013518730000				<b>APPROVAL</b>  Permit Manager						

**Newfield Production Company****4-15-3-3WH****Surface Hole Location: 530' FNL, 882' FWL, Section 15, T3S, R3W****Bottom Hole Location: 660' FSL, 660' FWL, Section 15, T3S, R3W****Duchesne County, UT****Drilling Program****1. Formation Tops**

Uinta	surface
Green River	3,871'
Garden Gulch member	6,597'
Uteland Butte	8,958'
Lateral TD	8,851' TVD / 13,398' MD

**2. Depth to Oil, Gas, Water, or Minerals**

Base of moderately saline	666'	(water)
Green River	6,597' - 8,851'	(oil)

**3. Pressure Control****Section                      BOP Description**

Surface                      12-1/4" diverter

Interm/Prod              The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system.

A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coupl	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Conductor 14	0'	60'	37	H-40	Weld	--	--	--	--	--	--
Surface 9 5/8	0'	2,500'	36	J-55	LTC	8.33	8.33	12	3,520	2,020	453,000
Intermediate 7	0'	9,024' 9,404'	26	P-110	BTC	11	11.5	15	9,960	6,210	830,000
Production 4 1/2	8,478'	8,851' 13,398'	13.5	P-110	BTC	11	11.5	--	12,410	10,670	422,000
									2.97	2.42	6.35

Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Intermediate casing MASP = (reservoir pressure) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

## 5. Cement

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	41	15%	15.8	1.17
				35			
Surface Lead	12 1/4	2,000'	Type III + .125 lbs/sk Cello Flakes	720	15%	11.0	3.33
				216			
Surface Tail	12 1/4	500'	Type III + .125 lbs/sk Cello Flakes	180	15%	13.0	1.9
				95			
Intermediate Lead	8 3/4	4,097'	Premium - 65% Class G / 35% Poz + 10% Bentonite	708	15%	11.5	2.59
				273			
Intermediate Tail	8 3/4	2,807'	50/50 Poz/Class G + 1% bentonite	485	15%	13.0	1.62
				300			
Production	6 1/8	--	Liner will not be cemented. It will be isolated with a liner top packer.	--	--	--	--
				--			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the intermediate casing string will be calculated from an open hole caliper log, plus 15% excess.

The cement slurries will be adjusted for hole conditions and blend test results.

The production liner will be left uncemented. Individual frac stages will be isolated with open hole packers. A liner top hanger and packer will be installed 50' above KOP.

## 6. Type and Characteristics of Proposed Circulating Medium

### Interval

### Description

Surface - 2,500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.

2,500' - TD

A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and

if conditions warrant, with barite.

Anticipated maximum mud weight is 11.5 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run in the intermediate section from the top of the curve to the base of the surface casing. A compensated neutron/formation density log will be run in the intermediate section from the top of the curve to the top of the Garden Gulch formation. A cement bond log will be run from the top of the curve to the cement top behind the intermediate casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

## 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.57 psi/ft gradient.

$$8,851' \times 0.57 \text{ psi/ft} = 5063 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

## 9. Other Aspects

An 8-3/4" vertical hole will be drilled to a kick off point of 8,528' .

Directional tools will then be used to build to 92.60 degrees inclination.

The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

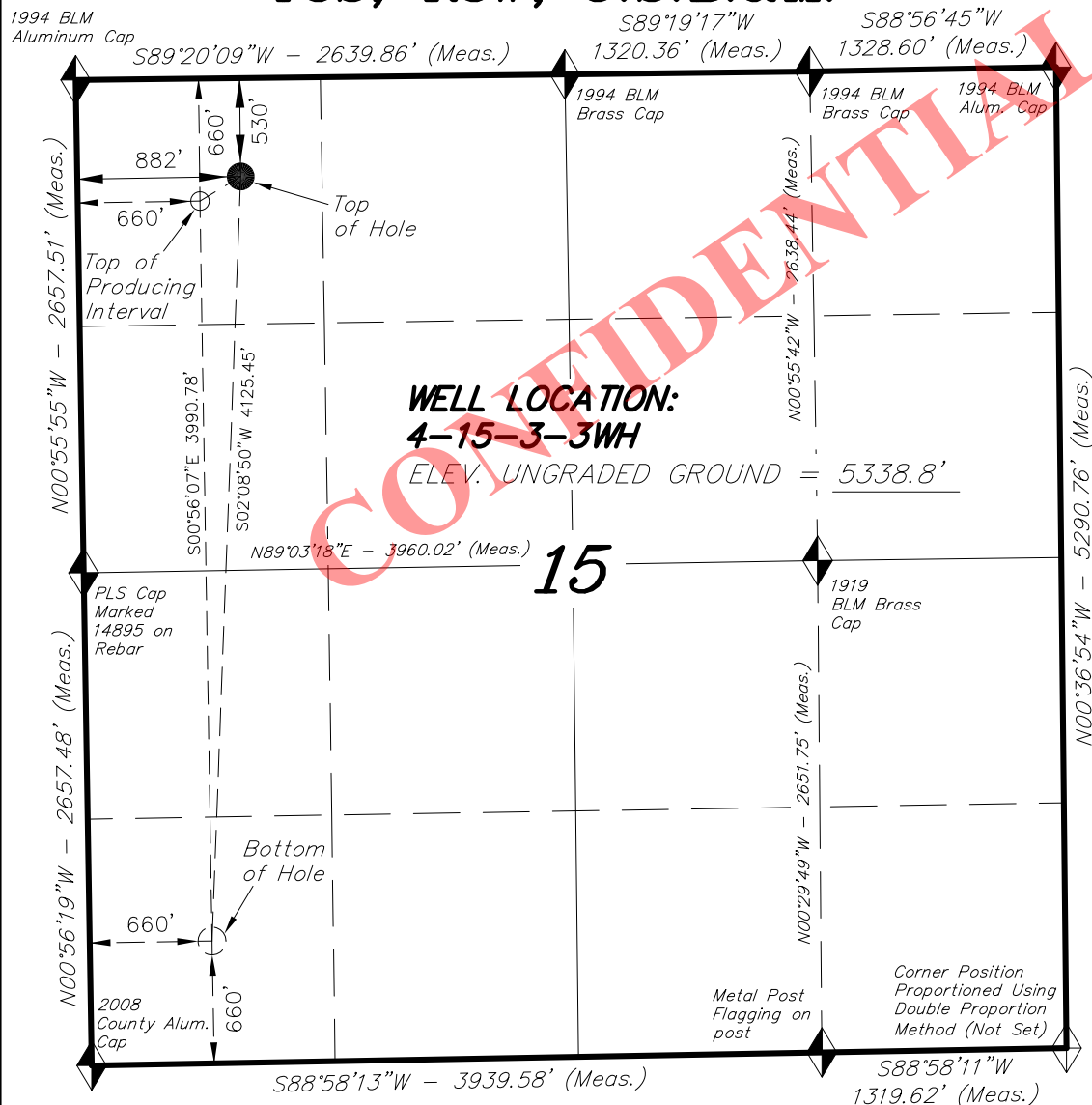
The lateral will be drilled to the bottomhole location shown on the plat.

A liner with a system of open hole packers will be used to provide multi-stage frac isolation in the lateral. The top of the liner will be place 50' above KOP and will be isolated with a liner top packer.

Newfield requests the following variances from Onshore Order #2:

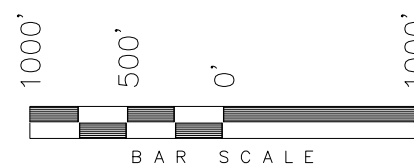
- Variance from Onshoer Order #2, III.E.1

Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

**T3S, R3W, U.S.B.&M.****NEWFIELD EXPLORATION COMPANY**

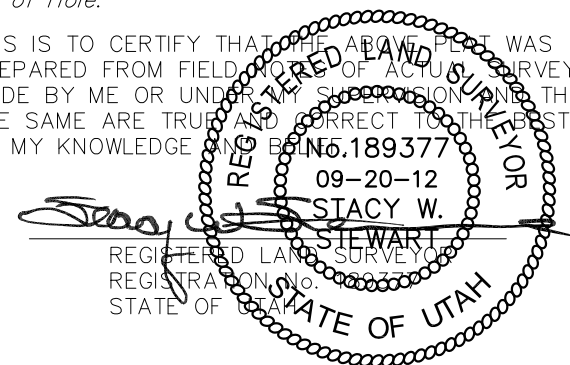
WELL LOCATION, 4-15-3-3WH, LOCATED AS SHOWN IN THE NW 1/4 NW 1/4 OF SECTION 15, T3S, R3W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, 4-15-3-3WH, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 15, T3S, R3W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

**NOTES:**

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.
3. The Top of Producing Interval bears S58°56'37"W 256.47' from the Top of Hole.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD RECORDS OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE = 40°13'40.03"	
LONGITUDE = 110°12'54.86"	
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE = 40°13'40.19"	
LONGITUDE = 110°12'52.31"	
<b>NAD 83 (TOP OF PROD. INTERVAL)</b>	<b>NAD 83 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°13'38.76"	LATITUDE = 40°12'59.33"
LONGITUDE = 110°12'57.72"	LONGITUDE = 110°12'57.62"
<b>NAD 27 (TOP OF PROD. INTERVAL)</b>	<b>NAD 27 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°13'38.91"	LATITUDE = 40°12'59.48"
LONGITUDE = 110°12'55.17"	LONGITUDE = 110°12'55.06"

**TRI STATE LAND SURVEYING & CONSULTING**

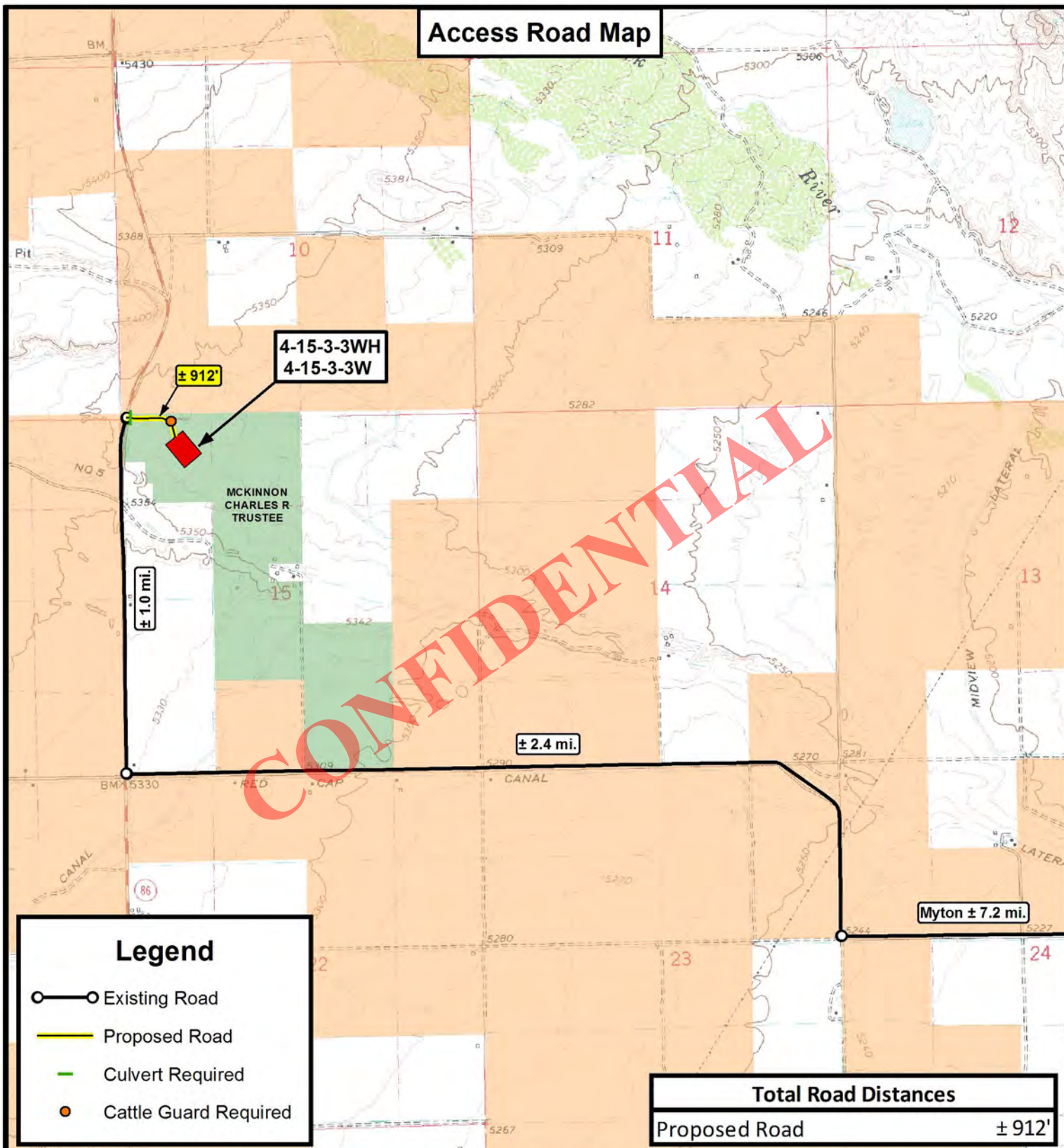
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 07-12-12	SURVEYED BY: Q.M.	VERSION:
DATE DRAWN: 07-31-12	DRAWN BY: R.B.T.	V2
REVISED: 09-20-12 V.H.	SCALE: 1" = 1000'	

RECEIVED: November 13, 2012



## Access Road Map



## Legend

- Existing Road
- Proposed Road
- Culvert Required
- Cattle Guard Required

## Total Road Distances

Proposed Road	± 912'
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THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



**Tri State  
Land Surveying, Inc.**

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



## NEWFIELD EXPLORATION COMPANY

4-15-3-3WH

4-15-3-3W

SEC. 15, T3S, R3W, U.S.B.&M.  
Duchesne County, UT.

DRAWN BY: A.P.C. REVISED: 09-20-12 A.P.C. VERSION:

DATE: 07-31-2012

SCALE: 1" = 2,000'

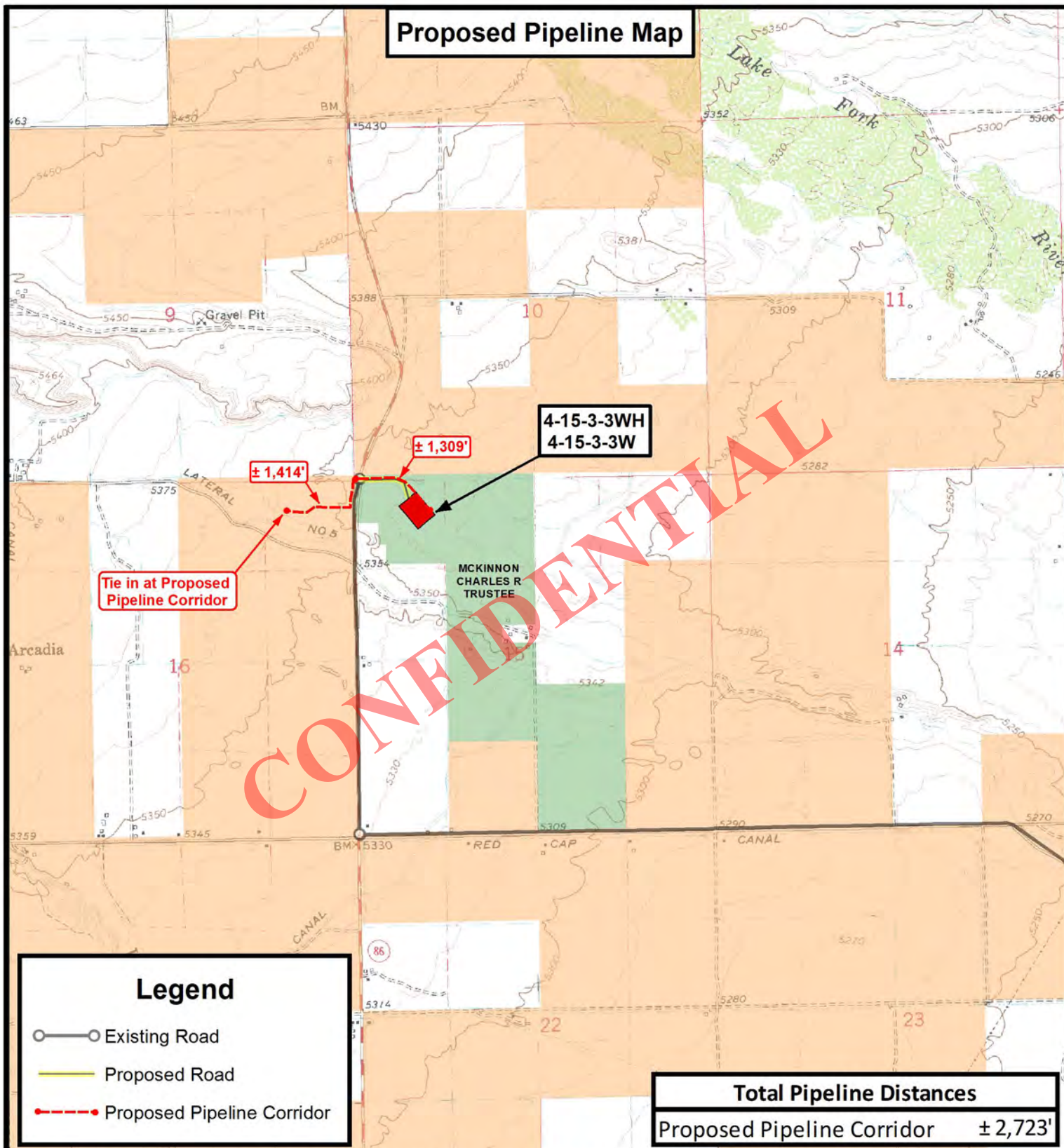
V2

TOPOGRAPHIC MAP

SHEET

**B**

## Proposed Pipeline Map



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## NEWFIELD EXPLORATION COMPANY

4-15-3-3WH  
4-15-3-3W  
SEC. 15, T3S, R3W, U.S.B.&M.  
Duchesne County, UT.

DRAWN BY: A.P.C. REVISED: 09-20-12 A.P.C. VERSION:

DATE: 07-31-2012

SCALE: 1" = 2,000'

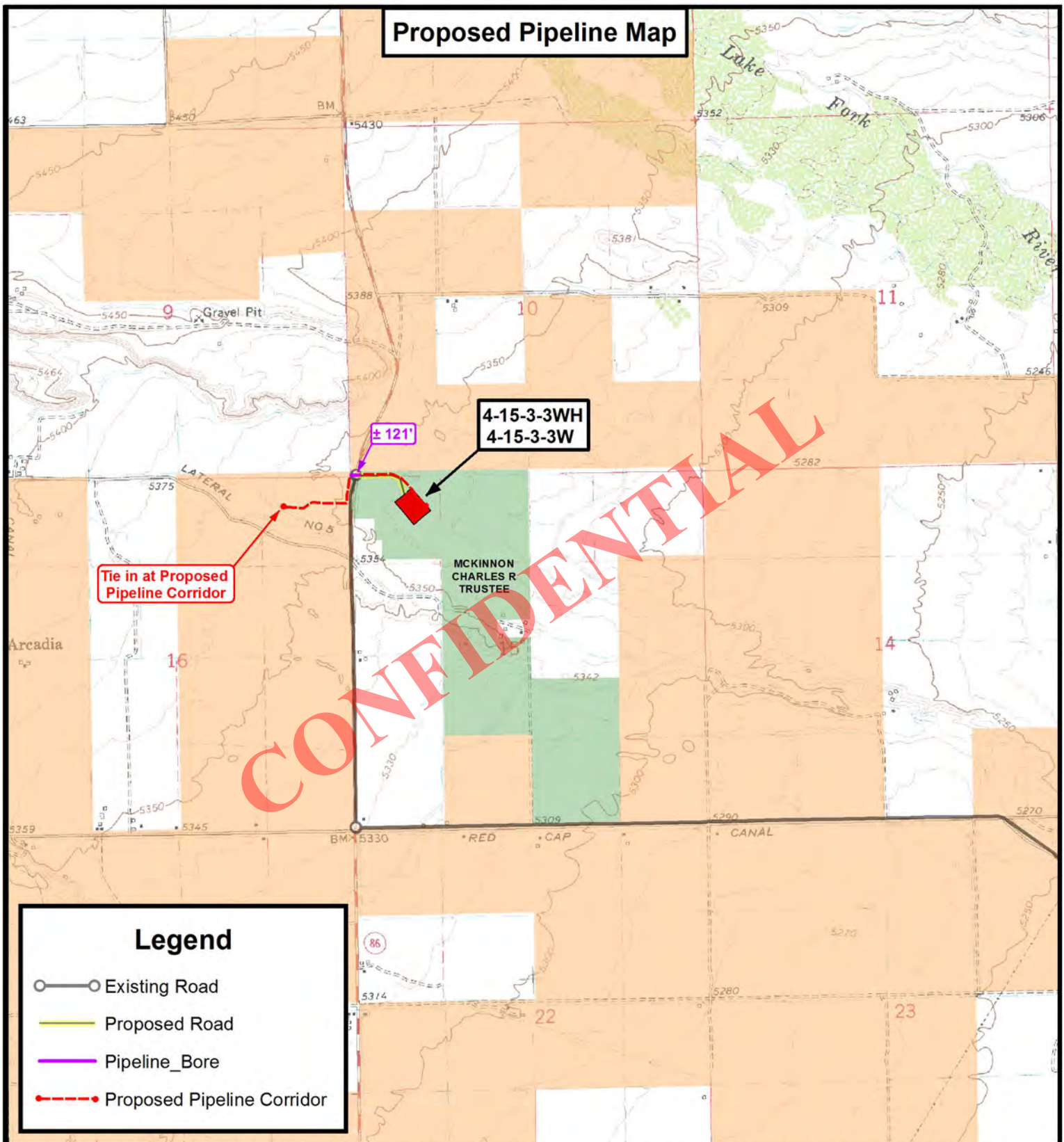
**V2**

**TOPOGRAPHIC MAP**

SHEET

**C1**

# Proposed Pipeline Map



## Legend

- Existing Road
- Proposed Road
- Pipeline\_Bore
- Proposed Pipeline Corridor

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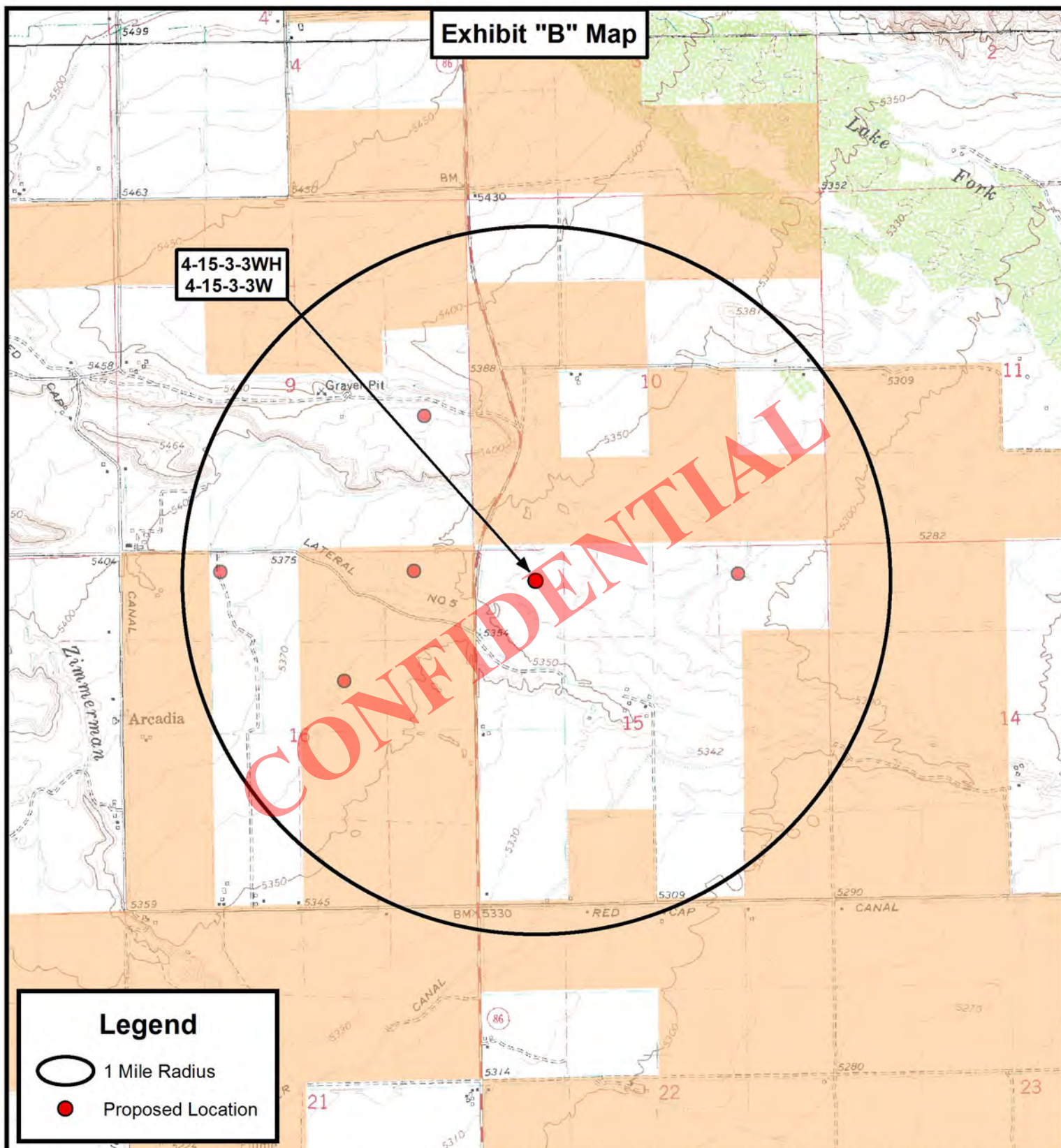
## NEWFIELD EXPLORATION COMPANY

4-15-3-3WH  
4-15-3-3W  
SEC. 15, T3S, R3W, U.S.B.&M.  
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	09-20-12 A.P.C.	VERSION:
DATE:	07-31-2012			V2
SCALE:	1" = 2,000'			

**TOPOGRAPHIC MAP**

SHEET  
**C2**



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## NEWFIELD EXPLORATION COMPANY

4-15-3-3WH  
4-15-3-3W  
SEC. 15, T3S, R3W, U.S.B.&M.  
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	09-20-12 A.P.C.	VERSION:
DATE:	07-31-2012			V2
SCALE:	1" = 2,000'			

**TOPOGRAPHIC MAP**

SHEET

**D**

# Newfield Exploration Company

Duchesne County, UT

Sec. 15-T3S-R3W

4-15-3-3WH

Plan A Rev 0 Permit

Plan: Plan A Rev 0 Proposed Permit ONLY

**Sperry Drilling Services**

## Proposal Report

02 November, 2012

Well Coordinates: 7,254,273.49 N, 1,999,120.12 E (40° 13' 40.03" N, 110° 12' 54.86" W)

Ground Level: 5,338.79 ft

Local Coordinate Origin:

Centered on Well 4-15-3-3WH

Viewing Datum:

WELL @ 5356.79ft (Original Well Elev)

TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

**HALLIBURTON**

Project: Duchesne County, UT

Site: Sec. 15-T3S-R3W

Well: 4-15-3-3WH

Wellbore: Plan A Rev 0 Permit

Design: Plan A Rev 0 Proposed Permit ONLY

## Newfield Exploration Company

HALLIBURTON

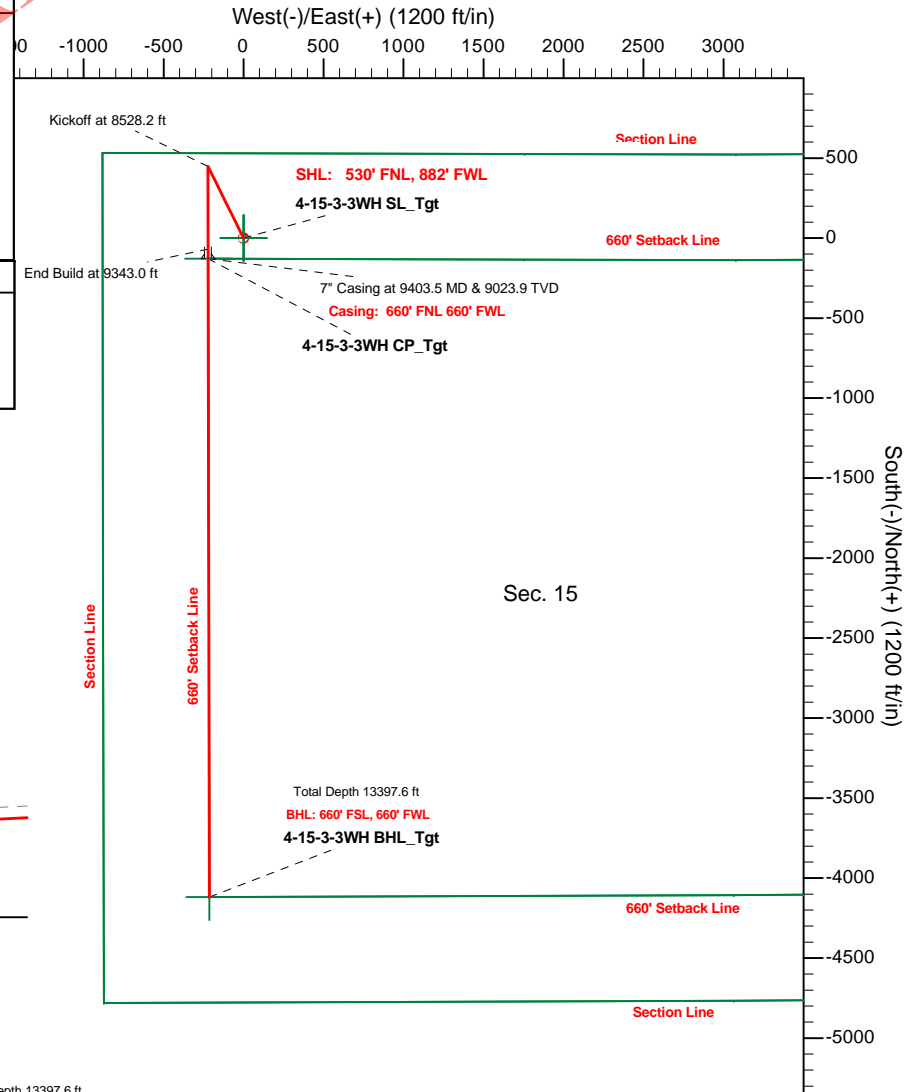
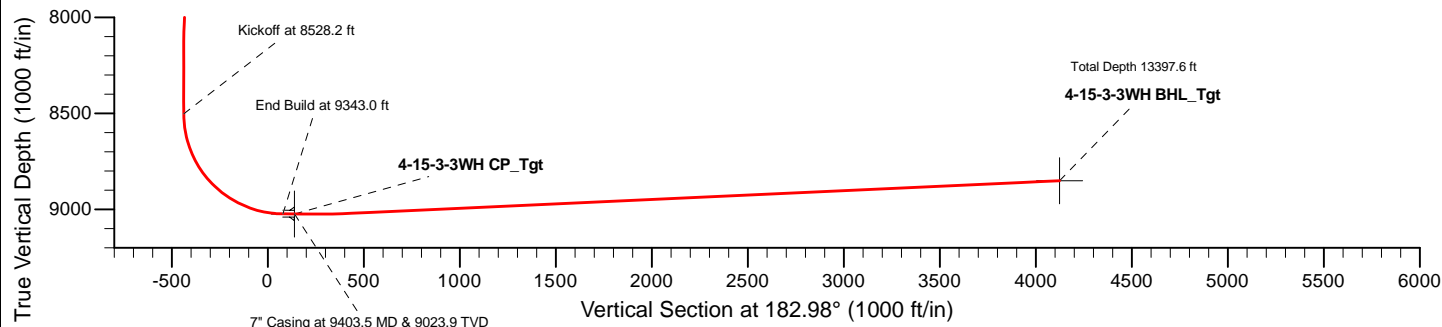
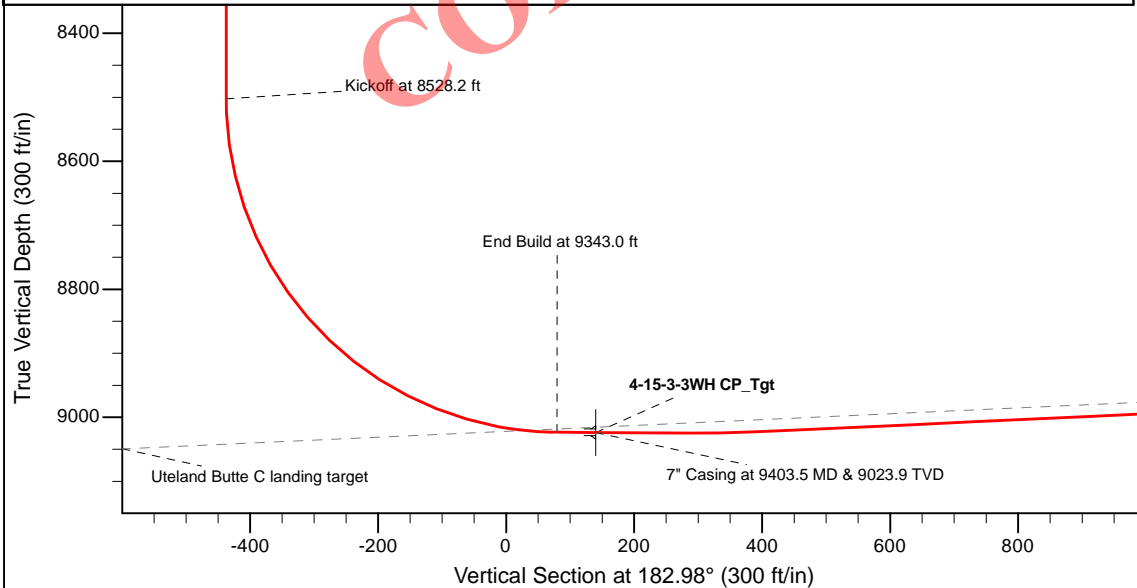
Sperry Drilling

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3400.0	6.00	333.62	3399.3	18.7	-9.3	1.50	333.62	-18.2	
4	7800.0	6.00	333.62	7775.2	430.8	-213.7	0.00	0.00	-419.1	
5	8200.0	0.00	0.00	8174.4	449.5	-222.9	1.50	180.00	-437.3	
6	8528.2	0.00	0.00	8502.6	449.5	-222.9	0.00	0.00	-437.3	
7	9343.0	89.63	179.89	9023.5	-68.0	-222.0	11.00	179.89	79.4	
8	9403.5	89.63	179.89	9023.9	-128.5	-221.8	0.00	0.00	139.9	4-15-3-3WH CP_Tgt
9	9553.5	89.63	179.89	9024.8	-278.5	-221.5	0.00	0.00	289.6	
10	9653.5	92.63	179.89	9022.8	-378.5	-221.4	3.00	-0.01	389.5	
11	13397.6	92.63	179.89	8851.0	-4118.6	-214.1	0.00	0.00	4124.2	4-15-3-3WH BHL_Tgt

## WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
4-15-3-3WH Section Lines	0.0	0.0	0.0	2211106.98	609333.03	40° 13' 40.030 N 110° 12' 54.860 W		Polygon
4-15-3-3WH Setback Lines	0.0	0.0	0.0	2211106.98	609333.03	40° 13' 40.030 N 110° 12' 54.860 W		Polygon
4-15-3-3WH SL_Tgt	0.0	0.0	0.0	2211106.98	609333.03	40° 13' 40.030 N 110° 12' 54.860 W		Point
4-15-3-3WH BHL_Tgt	8851.0	-4118.6	-214.1	2209850.92	609285.81	40° 12' 59.330 N 110° 12' 57.620 W		Point
4-15-3-3WH CP_Tgt	9024.0	-128.5	-221.8	2211066.85	609265.99	40° 13' 38.760 N 110° 12' 57.720 W		Point



## WELL DETAILS: 4-15-3-3WH

Ground Level: 5338.8			
Northing	Easting	Latitude	Longitude
2211106.98	609333.03	40° 13' 40.030 N	110° 12' 54.860 W

Plan A Rev 0 Proposed Permit ONLY (4-15-3-3WH/Plan A Rev 0 Permit)

Created By: Lacy Taylor

Date: 11/1/2012

Checked: \_\_\_\_\_

Date: \_\_\_\_\_

RECEIVED: November 13, 2012

**HALLIBURTON****Plan Report for 4-15-3-3WH - Plan A Rev 0 Proposed Permit ONLY**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.000	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.000	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.000	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.000	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.000	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.000	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.000	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.000	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.000	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.000	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.000	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.000	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.000	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.000	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.000	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.000	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.000	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.000	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.000	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,999.99	0.00	0.000	2,999.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	1.50	333.620	3,099.99	1.17	-0.58	-1.14	1.50	1.50	0.00	333.62
3,200.00	3.00	333.620	3,199.91	4.69	-2.33	-4.56	1.50	1.50	0.00	0.00
3,300.00	4.50	333.620	3,299.69	10.55	-5.23	-10.26	1.50	1.50	0.00	0.00
3,399.99	6.00	333.620	3,399.26	18.75	-9.30	-18.24	1.50	1.50	0.00	0.00
3,500.00	6.00	333.620	3,498.72	28.11	-13.94	-27.35	0.00	0.00	0.00	0.00
3,600.00	6.00	333.620	3,598.17	37.48	-18.59	-36.46	0.00	0.00	0.00	0.00
3,700.00	6.00	333.620	3,697.63	46.84	-23.23	-45.57	0.00	0.00	0.00	0.00
3,800.00	6.00	333.620	3,797.08	56.20	-27.88	-54.68	0.00	0.00	0.00	0.00
3,900.00	6.00	333.620	3,896.53	65.57	-32.52	-63.79	0.00	0.00	0.00	0.00
4,000.00	6.00	333.620	3,995.98	74.93	-37.16	-72.90	0.00	0.00	0.00	0.00
4,100.00	6.00	333.620	4,095.43	84.30	-41.81	-82.01	0.00	0.00	0.00	0.00
4,200.00	6.00	333.620	4,194.89	93.66	-46.45	-91.12	0.00	0.00	0.00	0.00
4,300.00	6.00	333.620	4,294.34	103.03	-51.10	-100.23	0.00	0.00	0.00	0.00
4,400.00	6.00	333.620	4,393.79	112.39	-55.74	-109.34	0.00	0.00	0.00	0.00
4,500.00	6.00	333.620	4,493.24	121.75	-60.39	-118.46	0.00	0.00	0.00	0.00
4,600.00	6.00	333.620	4,592.70	131.12	-65.03	-127.57	0.00	0.00	0.00	0.00
4,700.00	6.00	333.620	4,692.15	140.48	-69.68	-136.68	0.00	0.00	0.00	0.00
4,800.00	6.00	333.620	4,791.60	149.85	-74.32	-145.79	0.00	0.00	0.00	0.00
4,900.00	6.00	333.620	4,891.05	159.21	-78.96	-154.90	0.00	0.00	0.00	0.00
5,000.00	6.00	333.620	4,990.50	168.58	-83.61	-164.01	0.00	0.00	0.00	0.00
5,100.00	6.00	333.620	5,089.96	177.94	-88.25	-173.12	0.00	0.00	0.00	0.00
5,200.00	6.00	333.620	5,189.41	187.30	-92.90	-182.23	0.00	0.00	0.00	0.00
5,300.00	6.00	333.620	5,288.86	196.67	-97.54	-191.34	0.00	0.00	0.00	0.00
5,400.00	6.00	333.620	5,388.31	206.03	-102.19	-200.45	0.00	0.00	0.00	0.00
5,500.00	6.00	333.620	5,487.77	215.40	-106.83	-209.56	0.00	0.00	0.00	0.00
5,600.00	6.00	333.620	5,587.22	224.76	-111.48	-218.67	0.00	0.00	0.00	0.00
5,700.00	6.00	333.620	5,686.67	234.13	-116.12	-227.78	0.00	0.00	0.00	0.00
5,800.00	6.00	333.620	5,786.12	243.49	-120.76	-236.89	0.00	0.00	0.00	0.00

**HALLIBURTON**

Duchesne County, UT

**Plan Report for 4-15-3-3WH - Plan A Rev 0 Proposed Permit ONLY**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
5,900.00	6.00	333.620	5,885.57	252.86	-125.41	-246.00	0.00	0.00	0.00	0.00
6,000.00	6.00	333.620	5,985.03	262.22	-130.05	-255.11	0.00	0.00	0.00	0.00
6,100.00	6.00	333.620	6,084.48	271.58	-134.70	-264.22	0.00	0.00	0.00	0.00
6,200.00	6.00	333.620	6,183.93	280.95	-139.34	-273.34	0.00	0.00	0.00	0.00
6,300.00	6.00	333.620	6,283.38	290.31	-143.99	-282.45	0.00	0.00	0.00	0.00
6,400.00	6.00	333.620	6,382.83	299.68	-148.63	-291.56	0.00	0.00	0.00	0.00
6,500.00	6.00	333.620	6,482.29	309.04	-153.28	-300.67	0.00	0.00	0.00	0.00
6,600.00	6.00	333.620	6,581.74	318.41	-157.92	-309.78	0.00	0.00	0.00	0.00
6,700.00	6.00	333.620	6,681.19	327.77	-162.56	-318.89	0.00	0.00	0.00	0.00
6,800.00	6.00	333.620	6,780.64	337.13	-167.21	-328.00	0.00	0.00	0.00	0.00
6,900.00	6.00	333.620	6,880.10	346.50	-171.85	-337.11	0.00	0.00	0.00	0.00
7,000.00	6.00	333.620	6,979.55	355.86	-176.50	-346.22	0.00	0.00	0.00	0.00
7,100.00	6.00	333.620	7,079.00	365.23	-181.14	-355.33	0.00	0.00	0.00	0.00
7,200.00	6.00	333.620	7,178.45	374.59	-185.79	-364.44	0.00	0.00	0.00	0.00
7,300.00	6.00	333.620	7,277.90	383.96	-190.43	-373.55	0.00	0.00	0.00	0.00
7,400.00	6.00	333.620	7,377.36	393.32	-195.08	-382.66	0.00	0.00	0.00	0.00
7,500.00	6.00	333.620	7,476.81	402.69	-199.72	-391.77	0.00	0.00	0.00	0.00
7,600.00	6.00	333.620	7,576.26	412.05	-204.36	-400.88	0.00	0.00	0.00	0.00
7,700.00	6.00	333.620	7,675.71	421.41	-209.01	-409.99	0.00	0.00	0.00	0.00
7,799.98	6.00	333.620	7,775.15	430.78	-213.65	-419.10	0.00	0.00	0.00	0.00
7,900.00	4.50	333.620	7,874.74	438.97	-217.72	-427.08	1.50	-1.50	0.00	180.00
8,000.00	3.00	333.620	7,974.53	444.83	-220.62	-432.78	1.50	-1.50	0.00	180.00
8,100.00	1.50	333.620	8,074.45	448.35	-222.37	-436.20	1.50	-1.50	0.00	180.00
8,199.98	0.00	0.000	8,174.42	449.52	-222.95	-437.34	1.50	-1.50	0.00	180.00
8,300.00	0.00	0.000	8,274.44	449.52	-222.95	-437.34	0.00	0.00	0.00	0.00
8,400.00	0.00	0.000	8,374.44	449.52	-222.95	-437.34	0.00	0.00	0.00	0.00
8,500.00	0.00	0.000	8,474.44	449.52	-222.95	-437.34	0.00	0.00	0.00	0.00
8,528.15	0.00	0.000	8,502.58	449.52	-222.95	-437.34	0.00	0.00	0.00	0.00
8,528.18	0.00	179.889	8,502.62	449.52	-222.95	-437.34	0.00	0.00	0.00	179.89
<b>Kickoff at 8528.2 ft</b>										
8,550.00	2.40	179.889	8,524.43	449.06	-222.95	-436.88	11.02	11.02	0.00	179.89
8,600.00	7.90	179.889	8,574.21	444.57	-222.94	-432.40	11.00	11.00	0.00	0.00
8,650.00	13.40	179.889	8,623.33	435.33	-222.92	-423.17	11.00	11.00	0.00	0.00
8,700.00	18.90	179.889	8,671.33	421.43	-222.90	-409.29	11.00	11.00	0.00	0.00
8,750.00	24.40	179.889	8,717.79	402.99	-222.86	-390.87	11.00	11.00	0.00	0.00
8,800.00	29.90	179.889	8,762.26	380.18	-222.82	-368.10	11.00	11.00	0.00	0.00
8,850.00	35.40	179.889	8,804.34	353.21	-222.76	-341.17	11.00	11.00	0.00	0.00
8,900.00	40.90	179.889	8,843.64	322.33	-222.70	-310.34	11.00	11.00	0.00	0.00
8,950.00	46.40	179.889	8,879.81	287.83	-222.64	-275.88	11.00	11.00	0.00	0.00
9,000.00	51.90	179.889	8,912.50	250.02	-222.56	-238.13	11.00	11.00	0.00	0.00
9,050.00	57.40	179.889	8,941.41	209.25	-222.49	-197.42	11.00	11.00	0.00	0.00
9,100.00	62.90	179.889	8,966.28	165.90	-222.40	-154.13	11.00	11.00	0.00	0.00
9,150.00	68.40	179.889	8,986.89	120.37	-222.31	-108.66	11.00	11.00	0.00	0.00
9,200.00	73.90	179.889	9,003.03	73.06	-222.22	-61.43	11.00	11.00	0.00	0.00
9,250.00	79.40	179.889	9,014.57	24.43	-222.13	-12.87	11.00	11.00	0.00	0.00
9,295.93	84.46	179.889	9,021.02	-21.02	-222.04	32.52	11.00	11.00	0.00	0.00
<b>Uteland Butte C landing target</b>										
9,300.00	84.90	179.889	9,021.39	-25.08	-222.03	36.57	11.00	11.00	0.00	0.00
9,342.96	89.63	179.889	9,023.44	-67.98	-221.95	79.41	11.00	11.00	0.00	0.00
9,342.98	89.63	179.889	9,023.44	-68.00	-221.95	79.43	0.00	0.00	0.00	0.00
<b>End Build at 9343.0 ft</b>										
9,403.48	89.63	179.889	9,023.83	-128.50	-221.83	139.84	0.00	0.00	0.00	0.00
<b>7" Casing at 9403.5 MD &amp; 9023.9 TVD - 7"</b>										
9,403.50	89.63	179.889	9,023.83	-128.52	-221.83	139.86	0.00	0.00	0.00	0.00
<b>4-15-3-3WH CP_Tgt - 4-15-3-3WH CP_Tgt</b>										
9,500.00	89.63	179.889	9,024.46	-225.01	-221.65	236.22	0.00	0.00	0.00	0.00
9,553.50	89.63	179.889	9,024.80	-278.51	-221.54	289.64	0.00	0.00	0.00	0.00
9,600.00	91.03	179.889	9,024.54	-325.01	-221.45	336.07	3.00	3.00	0.00	-0.01
9,653.50	92.63	179.889	9,022.83	-378.48	-221.35	389.46	3.00	3.00	0.00	-0.01

**HALLIBURTON****Plan Report for 4-15-3-3WH - Plan A Rev 0 Proposed Permit ONLY**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
9,700.00	92.63	179.889	9,020.70	-424.93	-221.26	435.85	0.00	0.00	0.00	0.00
9,800.00	92.63	179.889	9,016.11	-524.83	-221.07	535.60	0.00	0.00	0.00	0.00
9,900.00	92.63	179.889	9,011.52	-624.72	-220.87	635.35	0.00	0.00	0.00	0.00
10,000.00	92.63	179.889	9,006.93	-724.62	-220.68	735.10	0.00	0.00	0.00	0.00
10,100.00	92.63	179.889	9,002.34	-824.51	-220.49	834.85	0.00	0.00	0.00	0.00
10,200.00	92.63	179.889	8,997.75	-924.41	-220.29	934.60	0.00	0.00	0.00	0.00
10,300.00	92.63	179.889	8,993.16	-1,024.30	-220.10	1,034.35	0.00	0.00	0.00	0.00
10,400.00	92.63	179.889	8,988.58	-1,124.19	-219.91	1,134.10	0.00	0.00	0.00	0.00
10,500.00	92.63	179.889	8,983.99	-1,224.09	-219.71	1,233.84	0.00	0.00	0.00	0.00
10,600.00	92.63	179.889	8,979.40	-1,323.98	-219.52	1,333.59	0.00	0.00	0.00	0.00
10,700.00	92.63	179.889	8,974.81	-1,423.88	-219.33	1,433.34	0.00	0.00	0.00	0.00
10,800.00	92.63	179.889	8,970.22	-1,523.77	-219.13	1,533.09	0.00	0.00	0.00	0.00
10,900.00	92.63	179.889	8,965.63	-1,623.67	-218.94	1,632.84	0.00	0.00	0.00	0.00
11,000.00	92.63	179.889	8,961.04	-1,723.56	-218.75	1,732.59	0.00	0.00	0.00	0.00
11,100.00	92.63	179.889	8,956.46	-1,823.46	-218.55	1,832.34	0.00	0.00	0.00	0.00
11,200.00	92.63	179.889	8,951.87	-1,923.35	-218.36	1,932.09	0.00	0.00	0.00	0.00
11,300.00	92.63	179.889	8,947.28	-2,023.24	-218.17	2,031.84	0.00	0.00	0.00	0.00
11,400.00	92.63	179.889	8,942.69	-2,123.14	-217.97	2,131.59	0.00	0.00	0.00	0.00
11,500.00	92.63	179.889	8,938.10	-2,223.03	-217.78	2,231.34	0.00	0.00	0.00	0.00
11,600.00	92.63	179.889	8,933.51	-2,322.93	-217.59	2,331.09	0.00	0.00	0.00	0.00
11,700.00	92.63	179.889	8,928.92	-2,422.82	-217.39	2,430.84	0.00	0.00	0.00	0.00
11,800.00	92.63	179.889	8,924.34	-2,522.72	-217.20	2,530.59	0.00	0.00	0.00	0.00
11,900.00	92.63	179.889	8,919.75	-2,622.61	-217.01	2,630.34	0.00	0.00	0.00	0.00
12,000.00	92.63	179.889	8,915.16	-2,722.51	-216.81	2,730.09	0.00	0.00	0.00	0.00
12,100.00	92.63	179.889	8,910.57	-2,822.40	-216.62	2,829.84	0.00	0.00	0.00	0.00
12,200.00	92.63	179.889	8,905.98	-2,922.30	-216.43	2,929.59	0.00	0.00	0.00	0.00
12,300.00	92.63	179.889	8,901.39	-3,022.19	-216.23	3,029.34	0.00	0.00	0.00	0.00
12,400.00	92.63	179.889	8,896.80	-3,122.08	-216.04	3,129.09	0.00	0.00	0.00	0.00
12,500.00	92.63	179.889	8,892.21	-3,221.98	-215.85	3,228.84	0.00	0.00	0.00	0.00
12,600.00	92.63	179.889	8,887.63	-3,321.87	-215.65	3,328.59	0.00	0.00	0.00	0.00
12,700.00	92.63	179.889	8,883.04	-3,421.77	-215.46	3,428.34	0.00	0.00	0.00	0.00
12,800.00	92.63	179.889	8,878.45	-3,521.66	-215.27	3,528.09	0.00	0.00	0.00	0.00
12,900.00	92.63	179.889	8,873.86	-3,621.56	-215.07	3,627.84	0.00	0.00	0.00	0.00
13,000.00	92.63	179.889	8,869.27	-3,721.45	-214.88	3,727.59	0.00	0.00	0.00	0.00
13,100.00	92.63	179.889	8,864.68	-3,821.35	-214.69	3,827.34	0.00	0.00	0.00	0.00
13,200.00	92.63	179.889	8,860.09	-3,921.24	-214.49	3,927.09	0.00	0.00	0.00	0.00
13,300.00	92.63	179.889	8,855.51	-4,021.13	-214.30	4,026.84	0.00	0.00	0.00	0.00
13,397.57	92.63	179.889	8,851.03	-4,118.60	-214.11	4,124.17	0.00	0.00	0.00	0.00
<b>Total Depth at 13397.6 ft</b>										
13,397.58	92.63	179.889	8,851.03	-4,118.61	-214.11	4,124.17	0.00	0.00	0.00	0.00
<b>4-15-3-3WH BHL_Tgt - 4-15-3-3WH BHL_Tgt</b>										

**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,528.18	8,502.62	449.52	-222.95	Kickoff at 8528.2 ft
9,342.98	9,023.44	-68.00	-221.95	End Build at 9343.0 ft
9,403.48	9,023.83	-128.50	-221.83	7" Casing at 9403.5 MD & 9023.9 TVD
13,397.57	8,851.03	-4,118.60	-214.11	Total Depth at 13397.6 ft

**HALLIBURTON****Plan Report for 4-15-3-3WH - Plan A Rev 0 Proposed Permit ONLY****Vertical Section Information**

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/_S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target	4-15-3-3WH BHL_Tgt	182.976	Slot	0.00	0.00	0.00

**Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	13,397.58	Plan A Rev 0 Proposed Permit ONLY	MWD

**Casing Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
9,403.48	9,023.83	7"		8-3/4

**Formation Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
9,295.93	9,021.98	Uteland Butte C landing target		-2.63	180.000

**Targets associated with this wellbore**

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
4-15-3-3WH BHL_Tgt	8,850.98	-4,118.61	-214.11	Point
4-15-3-3WH CP_Tgt	9,023.98	-128.52	-221.83	Point
4-15-3-3WH Setback Lines	0.00	0.00	0.00	Polygon
4-15-3-3WH Section Lines	0.00	0.00	0.00	Polygon
4-15-3-3WH SL_Tgt	0.00	0.00	0.00	Point

**North Reference Sheet for Sec. 15-T3S-R3W - 4-15-3-3WH - Plan A Rev 0 Permit**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to WELL @ 5356.79ft (Original Well Elev). Northing and Easting are relative to 4-15-3-3WH

Coordinate System is US State Plane 1983, Utah Central Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -111.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 39' 0.000 N°

False Easting: 1,640,416.67ft, False Northing: 6,561,666.67ft, Scale Reduction: 0.99992227

Grid Coordinates of Well: 7,254,273.49 ft N, 1,999,120.12 ft E

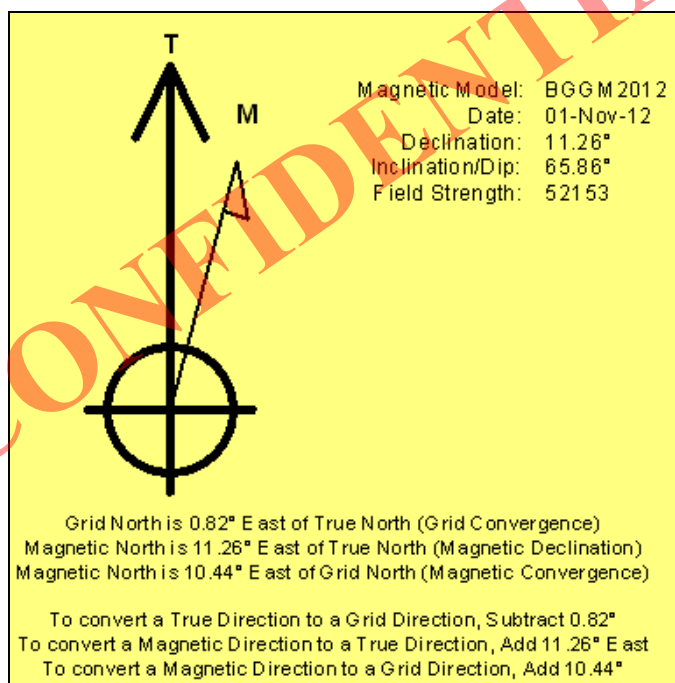
Geographical Coordinates of Well: 40° 13' 40.03" N, 110° 12' 54.86" W

Grid Convergence at Surface is: 0.82°

Based upon Minimum Curvature type calculations, at a Measured Depth of 13,397.58ft

the Bottom Hole Displacement is 4,124.17ft in the Direction of 182.98° (True).

Magnetic Convergence at surface is: -10.44° ( 1 November 2012, , BGGM2012)



**AFFIDAVIT OF EASEMENT, RIGHT-OF-WAY AND  
SURFACE USE AGREEMENT**

Peter Burns personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Peter Burns. I am a Land Associate for Newfield Production Company, whose address is 1001 17<sup>th</sup> Street, Suite 2000, Denver, CO 80202 ("Newfield").
2. Newfield is the Operator of the proposed McKinnon 4-15-3-3WH well with a surface location to be positioned in the NWNW of Section 15, Township 3 South, Range 3 West (the "Drillsite Location"), and a bottom hole location to be positioned in the SWSW of Section 15, Township 3 South, Range 3 West, Duchesne County, Utah. The surface owner of the Drillsite Location is Charles R. McKinnon and Loraine McKinnon, Trustees of the McKinnon Family Trust, whose address is HC 64 Box 380, Duchesne, UT 84021 and Irvin W. Johnson whose address is HC 64 Box 365, Duchesne, UT 84021 ("Surface Owners").
3. Newfield and the Surface Owners have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated August 24, 2012 covering the Drillsite Location and access to the Drillsite Location.

FURTHER AFFIANT SAYETH NOT.

  
\_\_\_\_\_  
Peter Burns

ACKNOWLEDGEMENT

STATE OF COLORADO           §

§

COUNTY OF DENVER         §

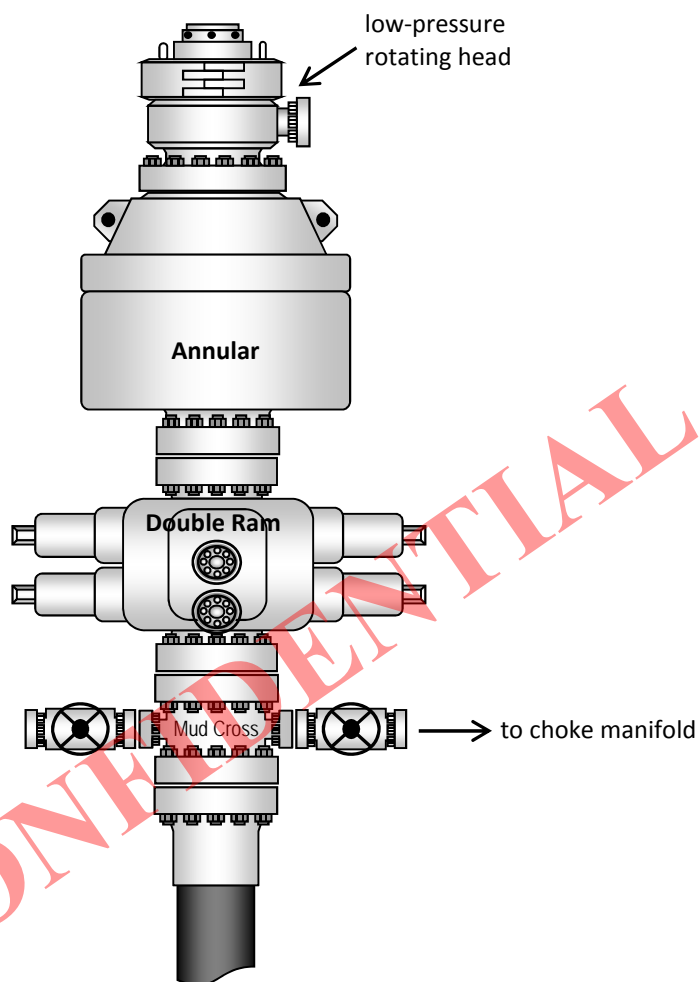
Before me, a Notary Public, in and for the State, on this 30th day of August, 2012, personally appeared Peter Burns, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

  
\_\_\_\_\_  
NOTARY PUBLIC

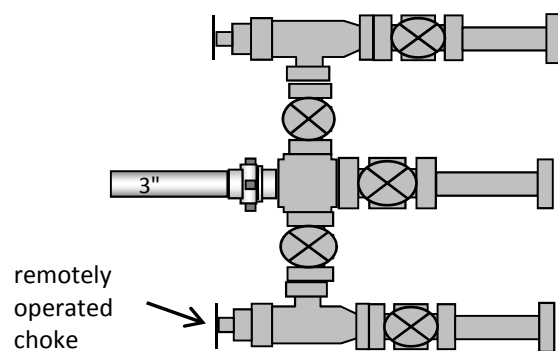
My Commission Expires:



**Typical 5M BOP stack configuration**



**Typical 5M choke manifold configuration**





November 7, 2012

State of Utah  
Division of Oil, Gas & Mining  
ATTN: Brad Hill  
P O Box 145801  
Salt Lake City, UT 84114

RE: **McKinnon 4-15-3-3WH**  
Section 15, T3S, R3W  
Duchesne County, Utah

Dear Mr. Hill,

Newfield Production Company ("Newfield") proposes to drill the McKinnon 4-15-3-3WH from a surface location of 530' FNL & 882' FWL of Section 15, T3S, R3W. Newfield shall case and cement the McKinnon 4-15-3-3WH wellbore from the surface location to the point where the wellbore reaches the legal setback of 660' FNL of Section 15, T3S, R3W. The cased and cemented portion of the wellbore shall not be perforated nor produced. In the event a future recompletion into the cased and cemented portion of the wellbore is proposed, Newfield shall file the appropriate application with the State.

Due to these circumstances, Newfield respectfully requests that DOGM administratively grant an exception location for the McKinnon 4-15-3-3WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-383-4138 or by email at [rwaller@newfield.com](mailto:rwaller@newfield.com). Your consideration of this matter is greatly appreciated.

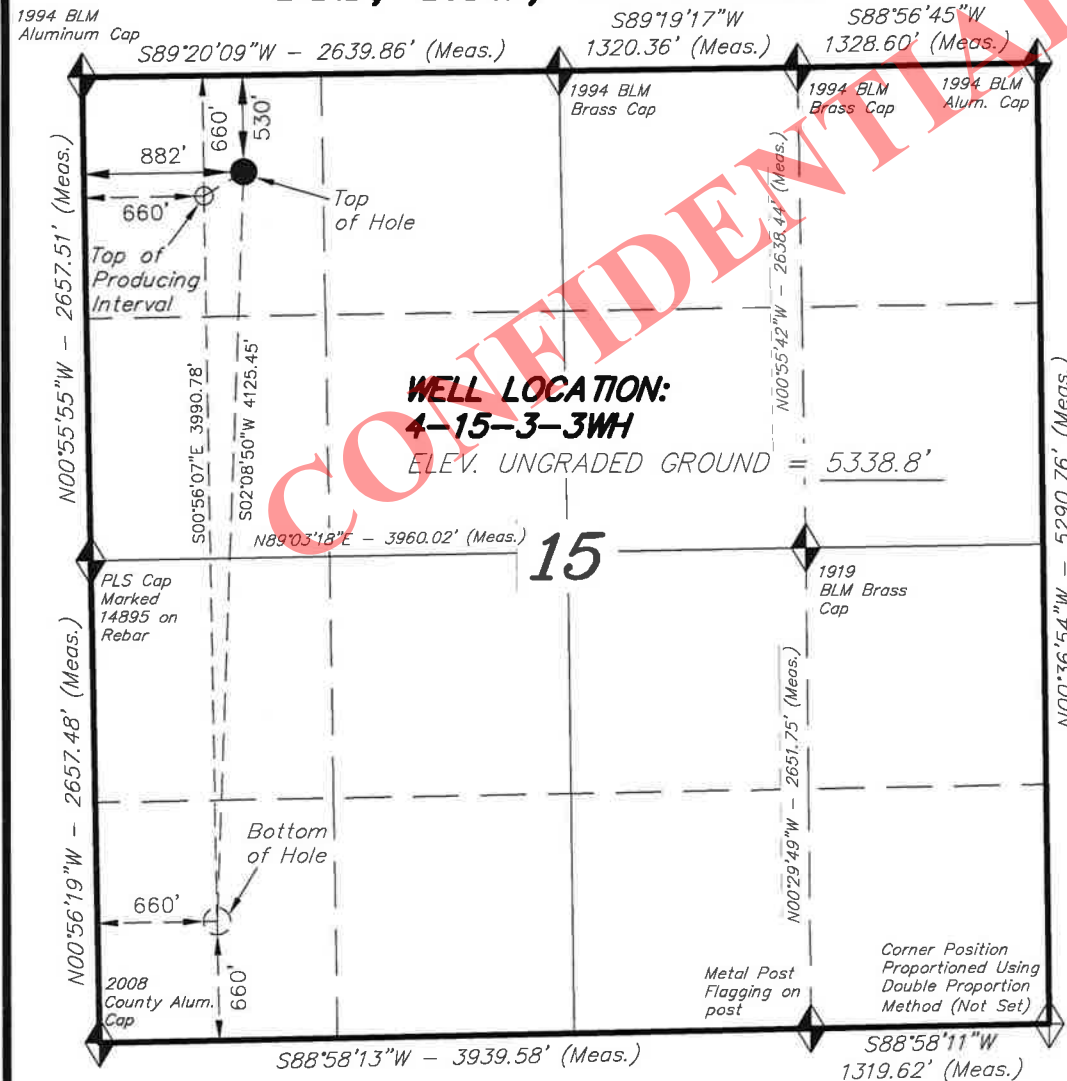
Sincerely,

A handwritten signature in black ink, appearing to read "Ryan Waller".

Ryan Waller  
Landman

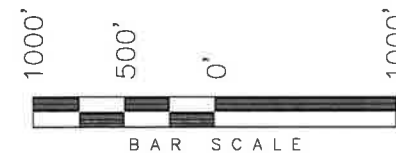
# T3S, R3W, U.S.B.&M.

## NEWFIELD EXPLORATION COMPANY



WELL LOCATION, 4-15-3-3WH, LOCATED AS SHOWN IN THE NW 1/4 NW 1/4 OF SECTION 15, T3S, R3W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

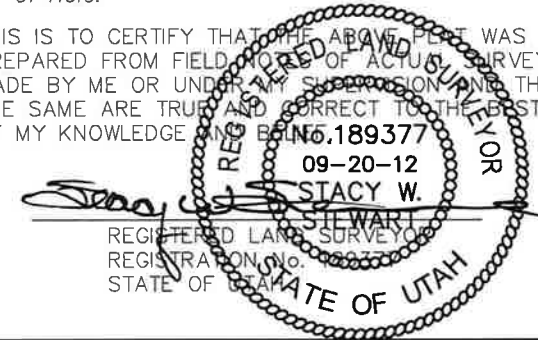
TARGET BOTTOM HOLE, 4-15-3-3WH, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 15, T3S, R3W, U.S.B.&M. DUCHESNE COUNTY, UTAH.



### NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.
3. The Top of Producing Interval bears S58°56'37"W 256.47' from the Top of Hole.

THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE = 40°13'40.03"	
LONGITUDE = 110°12'54.86"	
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE = 40°13'40.19"	
LONGITUDE = 110°12'52.31"	
<b>NAD 83 (TOP OF PROD. INTERVAL)</b>	<b>NAD 83 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°13'38.76"	LATITUDE = 40°12'59.33"
LONGITUDE = 110°12'57.72"	LONGITUDE = 110°12'57.62"
<b>NAD 27 (TOP OF PROD. INTERVAL)</b>	<b>NAD 27 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°13'38.91"	LATITUDE = 40°12'59.48"
LONGITUDE = 110°12'55.17"	LONGITUDE = 110°12'55.06"

## TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 07-12-12	SURVEYED BY: Q.M.	VERSION:
DATE DRAWN: 07-31-12	DRAWN BY: R.B.T.	V2
REVISED: 09-20-12 V.H.	SCALE: 1" = 1000'	

**NEWFIELD EXPLORATION COMPANY****WELL PAD INTERFERENCE PLAT****4-15-3-3WH****4-15-3-3W**

Pad Location: NWNW Section 15, T3S, R3W, U.S.B.&amp;M.

**LATITUDE & LONGITUDE  
Surface Position of Wells (NAD 83)**

WELL	LATITUDE	LONGITUDE
4-15-3-3WH	40° 13' 40.03"	110° 12' 54.86"
4-15-3-3W	40° 13' 39.80"	110° 12' 54.62"

Proposed Pit

Edge of  
Wetlands  
(Do Not  
Disturb)**TOP HOLE FOOTAGES**

4-15-3-3WH  
530' FNL & 882' FWL  
4-15-3-3W  
554' FNL & 901' FWL

**TOP OF PRODUCING  
INTERVAL FOOTAGES**

4-15-3-3WH  
660' FNL & 660' FWL

**BOTTOM HOLE FOOTAGES**

4-15-3-3WH  
660' FSL & 660' FWL  
4-15-3-3W  
660' FNL & 912' FWL

Edge of  
Proposed  
PadExist.  
Fence  
(Typ.)

**Note:**  
Bearings are based  
on GPS Observations.

**RELATIVE COORDINATES  
From Top Hole to Bottom Hole**

WELL	NORTH	EAST
4-15-3-3WH	-4,123'	-155'
4-15-3-3W	-106'	13'

**LATITUDE & LONGITUDE  
Top of Producing Interval (NAD 83)**

WELL	LATITUDE	LONGITUDE
4-15-3-3WH	40° 13' 38.76"	110° 12' 57.72"

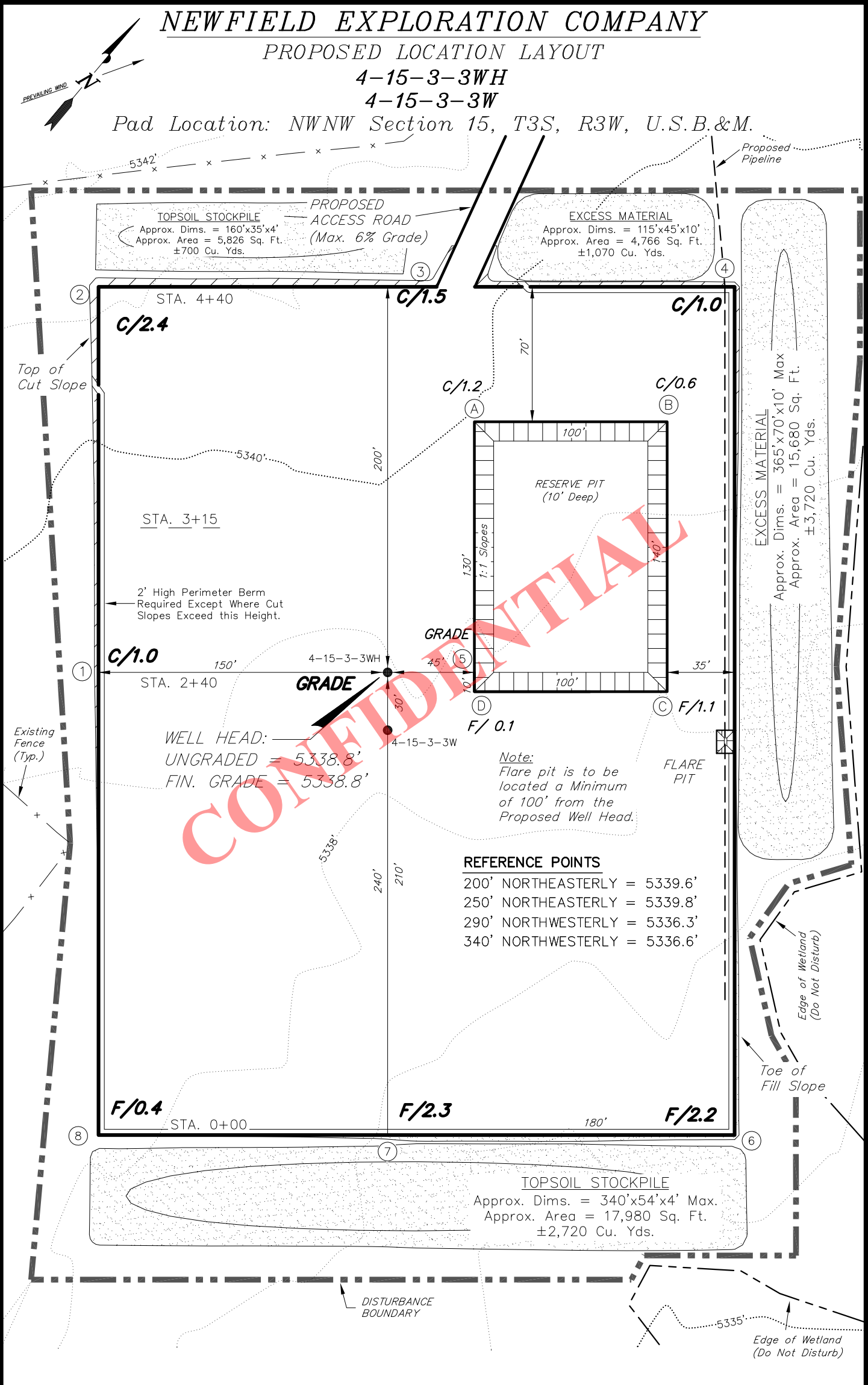
**LATITUDE & LONGITUDE  
Bottom Hole Position (NAD 83)**

WELL	LATITUDE	LONGITUDE
4-15-3-3WH	40° 12' 59.33"	110° 12' 57.62"
4-15-3-3W	40° 13' 38.75"	110° 12' 54.47"

SURVEYED BY: Q.M.    DATE SURVEYED: 07-12-12    VERSION:  
 DRAWN BY: R.B.T.    DATE DRAWN: 07-31-12    V2  
 SCALE: 1" = 60'    REVISED: V.H. 09-20-12

**Tri State** (435) 781-2501  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

RECEIVED: November 13, 2012



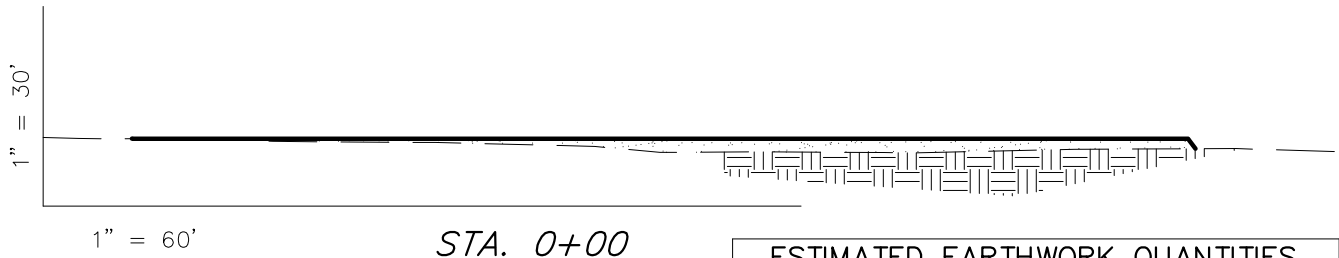
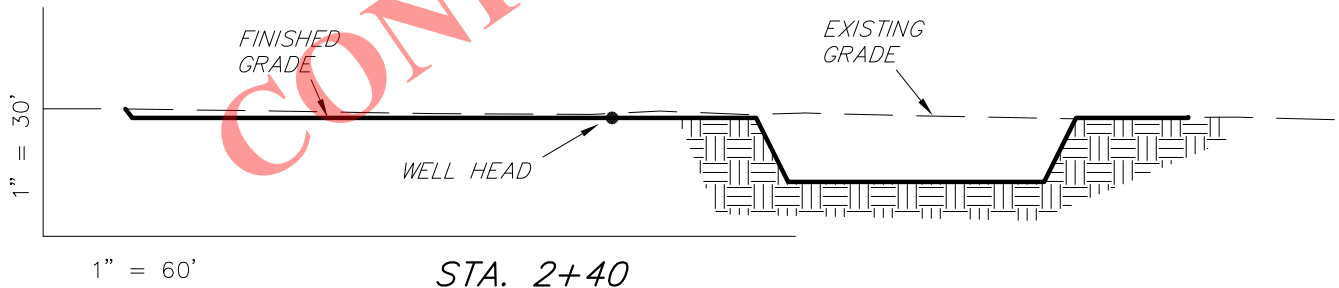
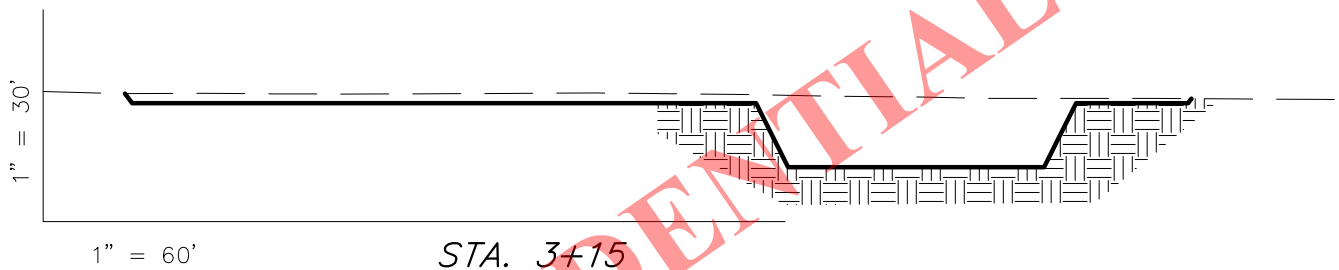
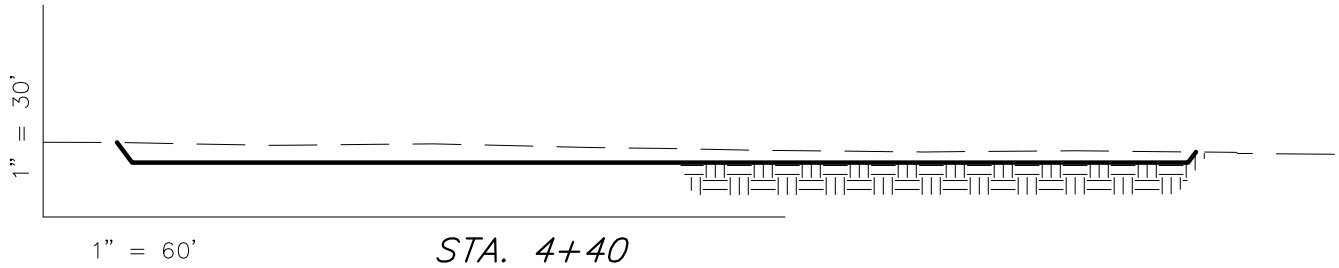
NOTE:  
The topsoil & excess material areas are calculated as being mounds containing 8,210 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

Note:  
Topsoil to be Stripped From All New Construction Areas and Proposed Stockpile Locations

SURVEYED BY:	Q.M.	DATE SURVEYED:	07-12-12	VERSION:
DRAWN BY:	R.B.T.	DATE DRAWN:	07-31-12	V2
SCALE:	1" = 60'	REVISED:	V.H. 09-20-12	

Tri State  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

(435) 781-2501

**NEWFIELD EXPLORATION COMPANY****CROSS SECTIONS****4-15-3-3WH****4-15-3-3W***Pad Location: NWNW Section 15, T3S, R3W, U.S.B.&M.*

NOTE:  
UNLESS OTHERWISE  
NOTED ALL CUT/FILL  
SLOPES ARE AT 1.5:1

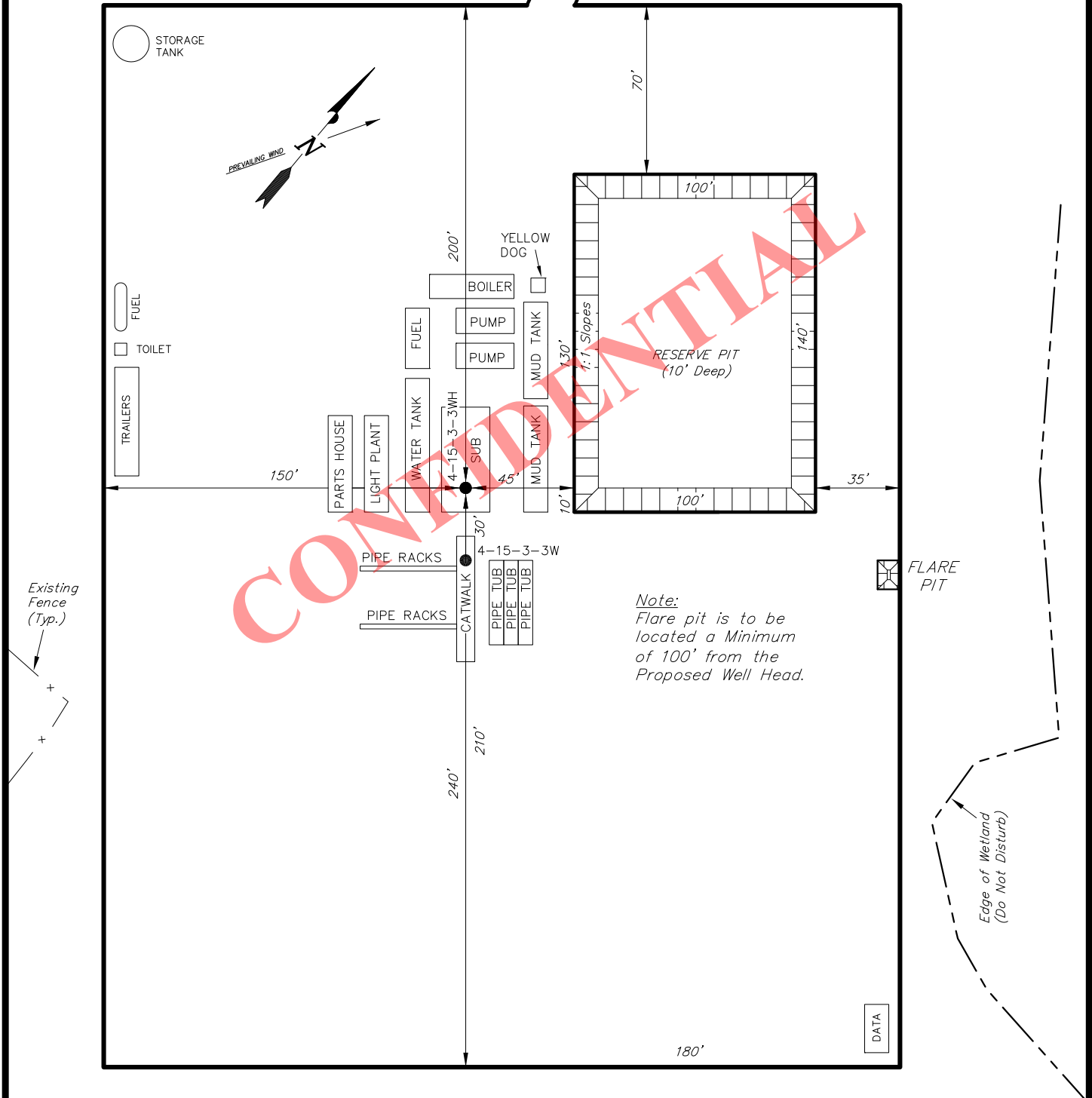
**ESTIMATED EARTHWORK QUANTITIES**  
(No Shrink or swell adjustments have been used)  
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	2,610	2,610	Topsoil is not included in Pad Cut Volume	0
PIT	4,350	0		4,350
TOTALS	6,960	2,610	3,110	4,350

SURVEYED BY: Q.M.	DATE SURVEYED: 07-12-12	VERSION:
DRAWN BY: R.B.T.	DATE DRAWN: 07-31-12	V2
SCALE: 1" = 60'	REVISED: V.H. 09-20-12	

**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

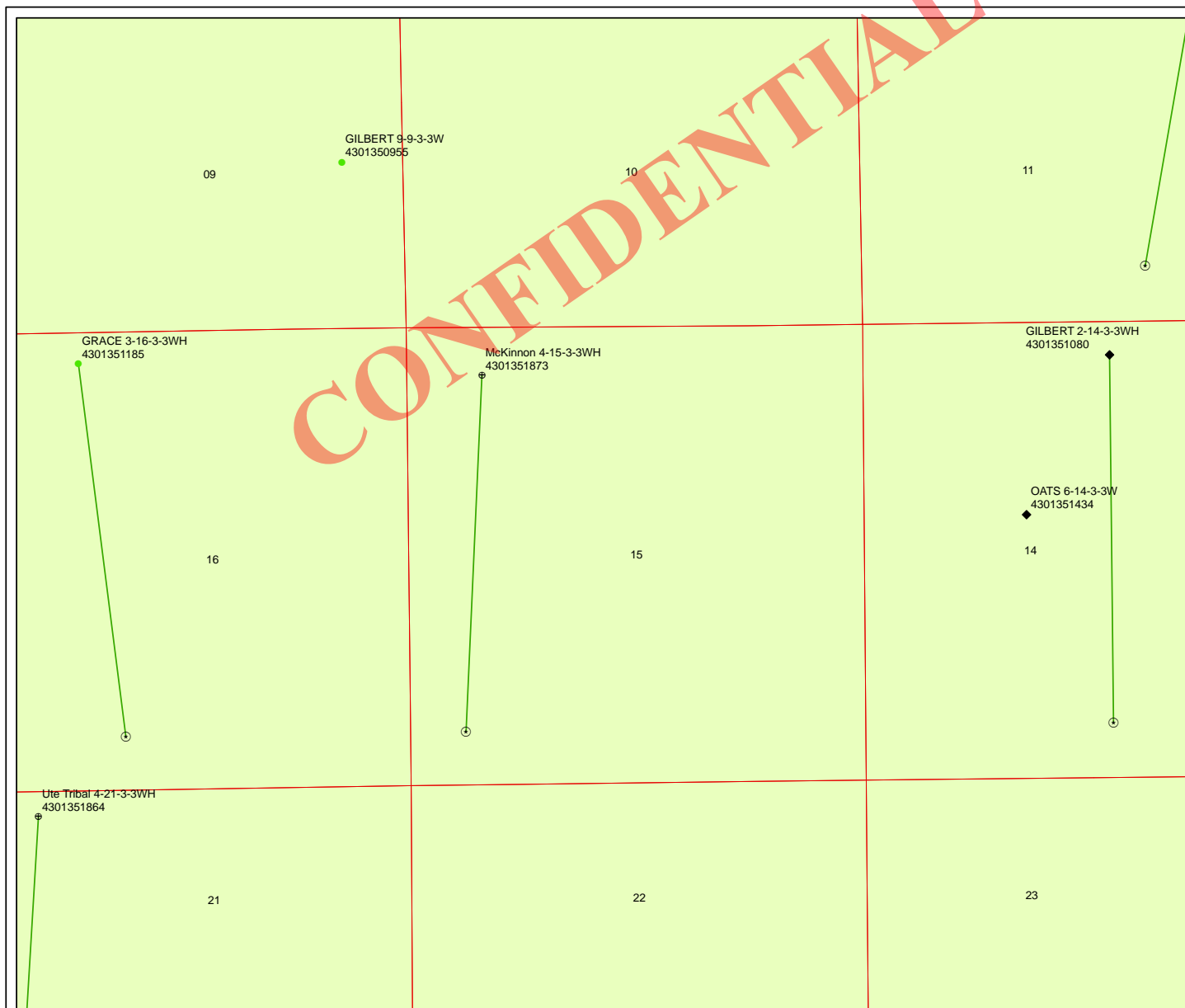
**RECEIVED:** November 13, 2012

**NEWFIELD EXPLORATION COMPANY****TYPICAL RIG LAYOUT****4-15-3-3WH****4-15-3-3W***Pad Location: NWNW Section 15, T3S, R3W, U.S.B.&M.**PROPOSED ACCESS ROAD  
(Max. 6% Grade)*

SURVEYED BY: Q.M.	DATE SURVEYED: 07-12-12	VERSION:
DRAWN BY: R.B.T.	DATE DRAWN: 07-31-12	V2
SCALE: 1" = 60'	REVISED: V.H. 09-20-12	

**Tri State** (435) 781-2501  
**Land Surveying, Inc.**  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

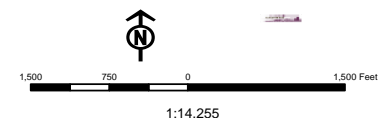
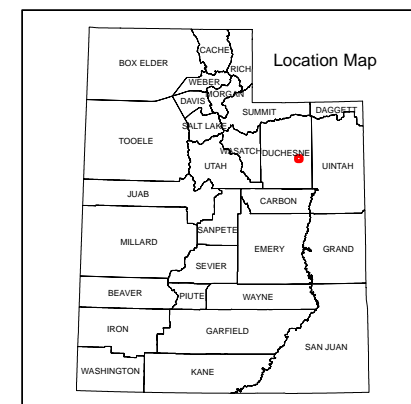
**RECEIVED:** November 13, 2012



**API Number: 4301351873**  
**Well Name: McKinnon 4-15-3-WH**  
**Township T03.0S Range R03.0W Section 15**  
**Meridian: UBM**  
**Operator: NEWFIELD PRODUCTION COMPANY**

Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query
<b>STATUS</b>	<b>STATUS</b>
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LOC - New Location
PI OIL	OPS - Operation Suspended
PP GAS	PA - Plugged Abandoned
PP GEOTHERM	PGW - Producing Gas Well
PP OIL	POW - Producing Oil Well
SECONDARY	SGW - Shut-in Gas Well
TERMINATED	SOW - Shut-in Oil Well
<b>Fields</b>	TA - Temp. Abandoned
Unknown	TW - Test Well
ABANDONED	WDW - Water Disposal
ACTIVE	WW - Water Injection Well
COMBINED	WSW - Water Supply Well
INACTIVE	Bottom Hole Location - Oil/Gas/Dib
STORAGE	
TERMINATED	



Well Name	NEWFIELD PRODUCTION COMPANY McKinnon 4-15-3-3WH 4301351			
String	Cond	Surf	I1	Prod
Casing Size(")	14.000	9.625	7.000	4.500
Setting Depth (TVD)	60	2500	9024	8851
Previous Shoe Setting Depth (TVD)	0	60	2500	9024
Max Mud Weight (ppg)	8.3	8.3	11.5	11.5
BOPE Proposed (psi)	0	500	5000	5000
Casing Internal Yield (psi)	1000	3520	9950	12410
Operators Max Anticipated Pressure (psi)	5063			11.0

Calculations	Cond String	14.000	"
Max BHP (psi)	.052*Setting Depth*MW=	26	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	19	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	13	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	13	NO
Required Casing/BOPE Test Pressure=		60	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

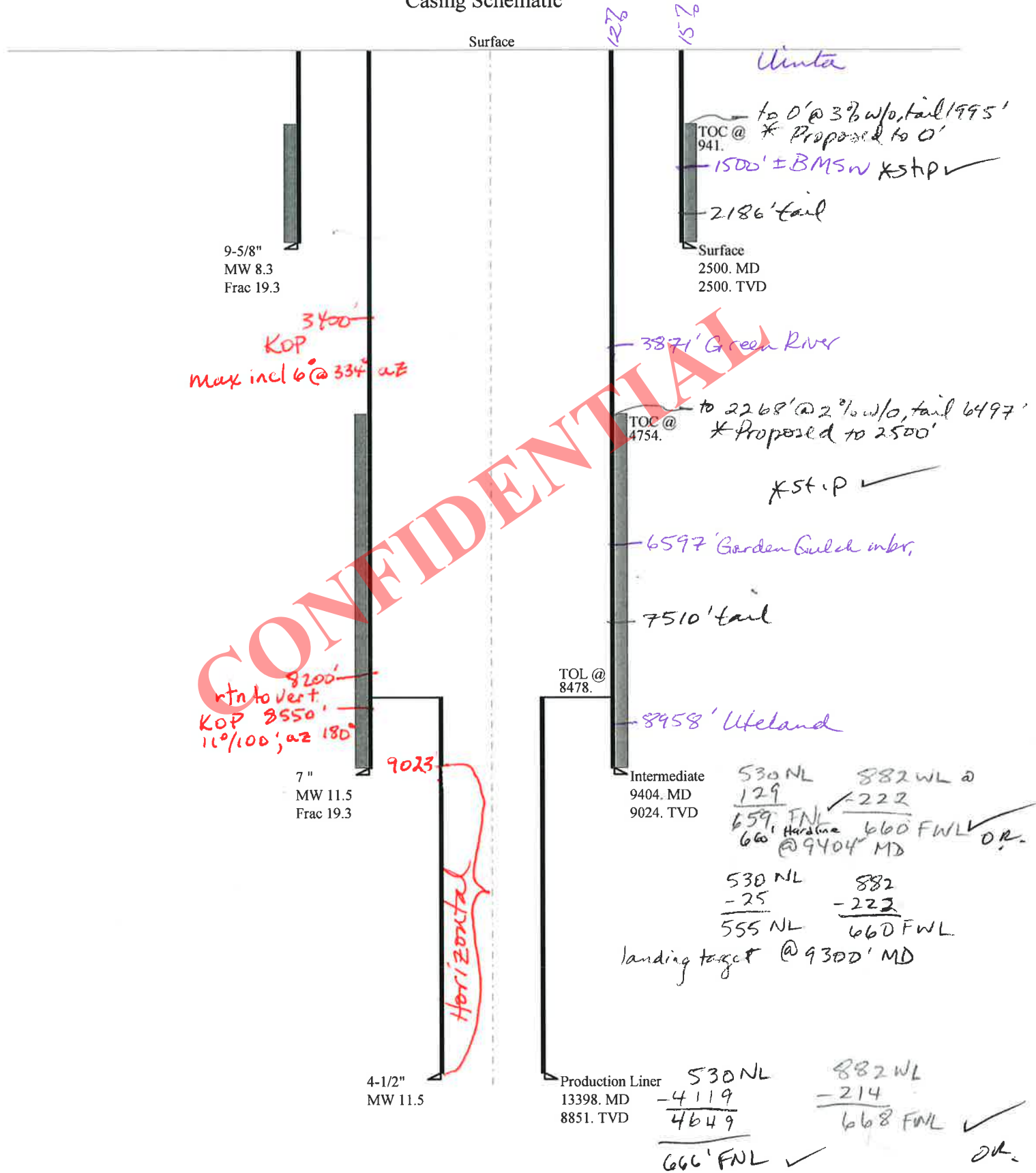
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1079	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	779	NO diverter
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	529	NO No expected pressure
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	542	NO
Required Casing/BOPE Test Pressure=		2464	psi
*Max Pressure Allowed @ Previous Casing Shoe=		60	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	5396	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4313	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3411	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3961	NO OK
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	5293	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4231	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3346	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	5331	YES
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		9024	psi *Assumes 1psi/ft frac gradient

## 43013518730000 McKinnon 4-15-3-WH

## Casing Schematic



Well name:	<b>43013518730000 McKinnon 4-15-3-3WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Surface	Project ID: 43-013-51873
Location:	DUCHESE COUNTY	

**Design parameters:****Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 109 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 941 ft

**Burst**

Max anticipated surface pressure: 2,200 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 2,192 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 9,024 ft  
Next mud weight: 11.500 ppg  
Next setting BHP: 5,391 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,500 ft  
Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2500	9.625	36.00	J-55	LT&C	2500	2500	8.796	20443
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1082	2020	1.867	2500	3520	1.41	90	453	5.03 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: January 17, 2013  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013518730000 McKinnon 4-15-3-3WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Intermediate	Project ID: 43-013-51873
Location:	DUCHESE COUNTY	

**Design parameters:****Collapse**

Mud weight: 11.500 ppg  
Internal fluid density: 1.000 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 200 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 4,754 ft

**Burst**

Max anticipated surface pressure: 3,406 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,391 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on air weight.  
Neutral point: 7,482 ft

**Directional Info - Build & Hold**

Kick-off point 3000 ft  
Departure at shoe: 257 ft  
Maximum dogleg: 11 °/100ft  
Inclination at shoe: 89.63 °

**Re subsequent strings:**

Next setting depth: 9,024 ft  
Next mud weight: 11.500 ppg  
Next setting BHP: 5,391 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 9,285 ft  
Injection pressure: 9,285 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9404	7	26.00	P-110	Buttress	9024	9404	6.151	104582

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4922	6230	1.266	5391	9950	1.85	234.6	830.4	3.54 B

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: January 17, 2013  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 9024 ft, a mud weight of 11.5 ppg. An internal gradient of .052 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	<b>43013518730000 McKinnon 4-15-3-3WH</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Production Liner	Project ID: 43-013-51873
Location:	DUCESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 11.500 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 198 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 3,340 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,288 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on air weight.  
Neutral point: 8,909 ft

Liner top: 8,851 ft

**Directional Info - Build & Hold**

Kick-off point: 3000 ft  
Departure at shoe: 4125 ft  
Maximum dogleg: 11 °/100ft  
Inclination at shoe: 92.63 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4498	4.5	13.50	P-110	Buttress	8851	13398	3.795	26985
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5288	10680	2.020	5326	12410	2.33	.1	421.9	99.99 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: January 17, 2013  
Salt Lake City, Utah

**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 8851 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** NEWFIELD PRODUCTION COMPANY  
**Well Name** McKinnon 4-15-3-3WH  
**API Number** 43013518730000      **APD No** 7143      **Field/Unit** WILDCAT  
**Location: 1/4,1/4** NWNW      **Sec** 15      **Tw** 3.0S      **Rng** 3.0W      530 FNL 882 FWL  
**GPS Coord (UTM)** 566761 4453335      **Surface Owner** Charles R. McKinnon and Loraine McKinnon, Trustees

### **Participants**

T. Eaton, F. Bird, C. Miller, Z. Mc Intyre, J. Henderson– Newfield; S. Wysong, J. Simonsen -BLM;  
 D. Petty, Paul Hawks , - Tristate; Todd Sherman, Randy Freston - Outlaw Engineering; Chuck  
 McKinnon, Ryan Harrison - Surface Owners

### **Regional/Local Setting & Topography**

The proposed action is in the Arcadia area in Duchesne County in a river floodplain below and north of the eastern portion of the Blue Bench and Bridgeland town. The city of Duchesne can be found approximately 5 miles West with Sand Wash Reservoir 6 miles North. The area is characterized by silty clayey sandy soils with slopes < 2% surrounded by terracing and benches of several different elevations capped by sandstone cliffs over highly erodible soils consistent with river floodplain profiles. The occasional Butte can also be found. This location is planned within a summer pasture of an active farm covered with Russian Olive. The area regionally is criss-crossed with numerous canals and associated laterals from the Lake Fork and Duchesne Rivers and Lake Boreham. The area has long been used for farming and ranching operations and has recently seen increasing development for petroleum extraction.

### **Surface Use Plan**

**Current Surface Use**  
 Agricultural

<b>New Road Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.172022	<b>Width</b> 300 <b>Length</b> 400	Offsite	UNTA

**Ancillary Facilities** N

Forrest committed to importing pit run and capping top with aggregate base course

**Waste Management Plan Adequate?** Y

### **Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

High desert shrubland ecosystem surrounds the farm. Expected vegetation would then consist of black sagebrush, shadscale, Atriplex spp., mustard spp, rabbit brush, horsebrush, broom snakeweed, Opuntia spp and spring annuals.

Dominant vegetation;

cultivated and introduced species like Russian Olive and salt grasses. Otherwise quite barren

Wildlife;

Adjacent habitat contains forbs that may be suitable browse for deer, antelope, prairie dogs or rabbits, though none were observed at the onsite. Active Raptor Nests and dog towns were observed on location during the 2012 season. This is Burrowing Owl habitat. Disturbed soils onsite do not support habitat for wildlife.

### Soil Type and Characteristics

Cultivated river bottom sediments. Fairly flat with no discernable slopes. Sodic residue suggesting high water table

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** Y

High water table will need to be mitigated for stability

**Drainage Diversion Required?** N

**Berm Required?** Y

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

### Reserve Pit

Site-Specific Factors		Site Ranking
<b>Distance to Groundwater (feet)</b>		20
<b>Distance to Surface Water (feet)</b>	100 to 200	15
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>	10 to 20	5
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		55 1 Sensitivity Level

### Characteristics / Requirements

A 140' x 100' x 10' deep reserve pit is planned in an area of cut on the North side of the location. A pit liner is required. Newfield commonly uses a 30 mil liner with a felt underliner because of the high water table, this will be a requirement. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete.

**Closed Loop Mud Required?** N **Liner Required?** Y **Liner Thickness** 30 **Pit Underlayment Required?** Y

API Well Number: 43013518730000

**Other Observations / Comments**

NO land owner issues

Chris Jensen  
**Evaluator**

11/28/2012  
**Date / Time**

CONFIDENTIAL

RECEIVED: February 25, 2013

# Application for Permit to Drill

## Statement of Basis

### Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
7143	43013518730000	LOCKED	OW	P	No
Operator	NEWFIELD PRODUCTION COMPANY		Surface Owner-APD	Charles R. McKinnon and Loraine McKinnon, Trustees	
Well Name	McKinnon 4-15-3-3WH		Unit		
Field	WILDCAT		Type of Work	DRILL	
Location	NWNW 15 3S 3W U 530 FNL 882 FWL GPS Coord (UTM) 566761E 4453326N				

#### Geologic Statement of Basis

Newfield proposes to set 60' of conductor and 2,500' of surface casing at this location. The base of the moderately saline water at this location is estimated to be at a depth of 1,500'. Air and or fresh water will be used to drill the entire surface hole. A search of Division of Water Rights records shows 15 water wells within a 10,000 foot radius of the center of Section 15. Depth is listed as ranging from 52 to 400 feet. Depths are not listed for 4 wells. Water use is listed as irrigation, stock watering and domestic use. The nearest well is approximately 1/4 mile from the proposed location. This well is listed as 270 feet in depth. The surface formation at this site is the Uinta Formation. Wells in this area likely produce water from either the Uinta Formation or from near-surface alluvium. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement program should adequately protect ground water in this area.

Brad Hill  
APD Evaluator

12/27/2012  
Date / Time

#### Surface Statement of Basis

Location is proposed in a good location although outside the spacing window typical of an horizontal well. Access road enters the pad from the South. The landowner and its representative was in attendance for the pre-site inspection.

The soil type and topography at present do not combine to pose a significant threat to erosion or sediment/ pollution transport in these regional climate conditions.

Construction standards of the Operator appear to be adequate for the proposed purpose. Plans lack measures for importing materials, using a geogrid or compacting native soils to improve stability. Forrest Bird has committed to importing pit run and aggregate base coarse to mitigate the high water table and improve stability.

I recognize no special flora or animal species or cultural resources on site that the proposed action may harm. A wetland area can be found adjacent the site to the East. The location was not previously surveyed for cultural and paleontological resources as the operator saw fit. I am advising an ESA consultation to be initiated to insure no disturbance to TES species that were seen ( or sign of) previously.

A location berm to be adequately constructed to prevent spills from leaving the confines of the pad. Fencing around the reserve pit will be necessary once the well is drilled to prevent wildlife and livestock from entering. A synthetic liner of 30 mils (minimum) should be utilized in the reserve pit.

Chris Jensen  
Onsite Evaluator

11/28/2012  
Date / Time

**Conditions of Approval / Application for Permit to Drill**

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	BMPs shall be used to ensure mitigation of high water table issues and to provide for pad stability.
Surface	The well site shall be bermed and constructed sufficiently to prevent fluids from leaving the pad.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

CONFIDENTIAL

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/13/2012

API NO. ASSIGNED: 43013518730000

WELL NAME: McKinnon 4-15-3-3WH

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 719-2018

CONTACT: Don Hamilton

PROPOSED LOCATION: NWNW 15 030S 030W

Permit Tech Review: ☒

SURFACE: 0530 FNL 0882 FWL

Engineering Review: ☒

BOTTOM: 0660 FSL 0660 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.22770

LONGITUDE: -110.21527

UTM SURF EASTINGS: 566761.00

NORTHINGS: 4453326.00

FIELD NAME: WILDCAT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Patented

PROPOSED PRODUCING FORMATION(S): UTELAND BUTTE

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - B001834☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 437478☐ RDCC Review:☒ Fee Surface Agreement☐ Intent to Commingle

Commingling Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit:

☐ R649-3-2. General☒ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 139-90

Effective Date: 5/9/2012

Siting: 4 Prod LGRRV-WSTC Wells

☐ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - bhill  
5 - Statement of Basis - bhill  
12 - Cement Volume (3) - hmacdonald  
25 - Surface Casing - hmacdonald  
27 - Other - bhill

RECEIVED: February 25, 2013



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** McKinnon 4-15-3-3WH

**API Well Number:** 43013518730000

**Lease Number:** Patented

**Surface Owner:** FEE (PRIVATE)

**Approval Date:** 2/25/2013

### Issued to:

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-90. The expected producing formation or pool is the UTELAND BUTTE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Cement volume for the 4 1/2 production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2300' MD.

Surface casing shall be cemented to the surface.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program  
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "J. Rogers", written over a faint horizontal line.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Patented
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1001 17th Street, Suite 2000 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> McKinnon 4-15-3-3WH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0530 FNL 0882 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 15 Township: 03.0S Range: 03.0W Meridian: U		<b>9. API NUMBER:</b> 43013518730000
<b>PHONE NUMBER:</b> 303 382-4443 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NORTH MYTON BENCH
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>2/26/2015</b>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> <b>APD EXTENSION</b> OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

This sundry notice is being submitted to request an extension to this APD that expires 02/25/2015.

Approved by the  
 January 22, 2015  
 Oil, Gas and Mining

Date: \_\_\_\_\_

By:

<b>NAME (PLEASE PRINT)</b> Melissa Luke	<b>PHONE NUMBER</b> 303 323-9769	<b>TITLE</b> Regulatory Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/21/2015	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43013518730000**

API: 43013518730000

Well Name: McKinnon 4-15-3-3WH

Location: 0530 FNL 0882 FWL QTR NWNW SEC 15 TWNP 030S RNG 030W MER U

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 2/25/2013

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Melissa Luke

Date: 1/21/2015

Title: Regulatory Technician Representing: NEWFIELD PRODUCTION COMPANY



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA

*Division Director*

March 10, 2016

Newfield Production Company  
Rt 3 Box 3630  
Myton, UT 84052

Re: APD Rescinded – McKinnon 4-15-3-3WH, Sec. 15, T.3, R.3W,  
Duchesne County, Utah API No. 43-013-51873

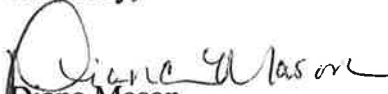
Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on February 25, 2013. On December 18, 2013 and January 22, 2015, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the Division. Therefore, approval to drill the well is hereby rescinded, effective March 10, 2016.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
Brad Hill, Technical Service Manager